Betamax

VIDEOCASSETTE RECORDER

SL-5800

US Model
Canadian Model

SONY
TIME COMMANDER SL-5800

SPECIFICATIONS

General

Video recording system:	Rotary two-head helical scanning
Video signal:	EIA standard, NTSC color
Storage temperature:	–20°C to 65°C (–4°F to +149°F)
Operating temperature:	5°C to 40°C (41°F to 104°F)
Antenna:	75 ohm external antenna terminal for VHF 300 ohm external antenna terminals for UHF
Channel coverage:	VHF channels 2–13 UHF channels 14–83
VHF output signal:	Channel 3 or 4 (selectable) 75 ohms, unbalanced
Timer:	used only in the recording mode Electronic digital timer 12-hour-clock cycle synchronized with the power frequency
Power requirements:	120 V ac ± 10%, 60 Hz ± 0.5%
AC OUTLET:	Unswitched max. 400W
Power consumption:	65 W
Weight:	16.5 kg (36 lb 6 oz)
Dimensions:	495 x 162 x 377 mm (w/h/d) ($19^{1}/2$ x $6^{1}/2$ x $14^{7}/8$ inches)

Video

Input:	VIDEO IN: phono-type connector 1.0 V (p-p), 75 ohms, unbalanced, sync negative
Output:	VIDEO OUT: phono-type connector 1.0 V (p-p), 75 ohms, unbalanced, sync negative
Signal-to-noise ratio:	Better than 45 dB

Audio

Input:	AUDIO IN: mini jack 100 k ohms, –10 dB MIC: mini jack –60 dB, suitable for microphone with 600 ohm impedance
Output:	AUDIO OUT: mini jack Less than 10 k ohms, –5 dB (100 k ohm load), unbalanced
Frequency response:	β II : 50–10,000 Hz β III : 50–7,000 Hz
Signal-to-noise ratio:	Better than 40 dB

Tape transport

Tape speed:	β II : 2.0 cm/sec. β III : 1.33 cm/sec.
Maximum recording time:	β II : 3 hours 20 min. β III : 5 hours (with Sony L-830 cassette)
Fast forward time:	Within $3^{1}/2$ min. (L-500)
Rewind time:	Within $3^{1}/2$ min. (L-500)

Accessories supplied

Betamax video cassette tape
External antenna connector EAC-24 (75 ohm to 300 ohm matching transformer)
External antenna connector EAC-25 (300 ohm to 75 ohm matching transformer)
75 ohm coaxial cable with F-type connectors (2 m)
300 ohm ribbon-type lead in (2 m)
Remote Commander BetaScan control
Channel number segments

Optional accessories

Extension cable RFC-8
Betamax video cassette tape L-250, L-500, L-750, L-830
Cassette auto changer AG-300

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SONY®

SERVICE MANUAL

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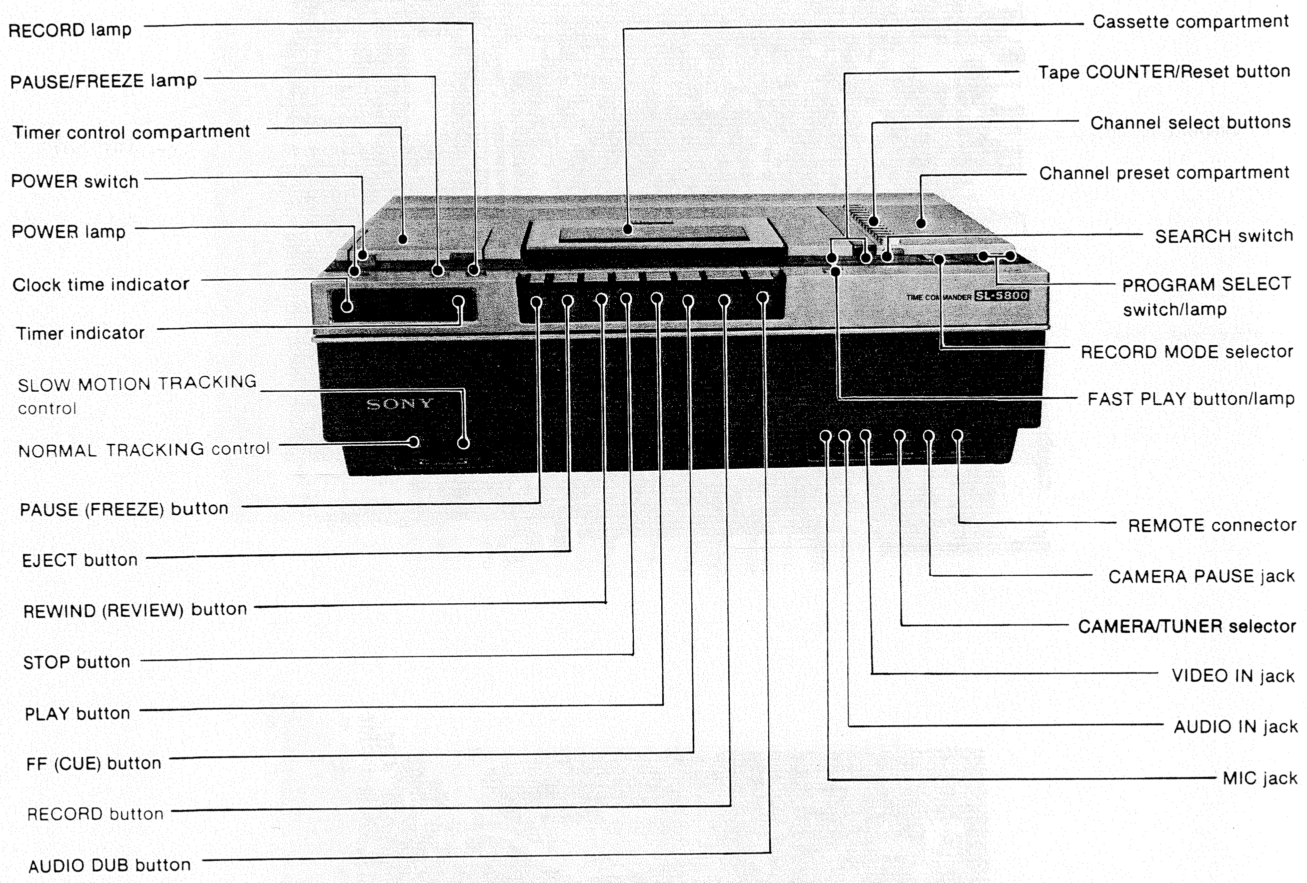
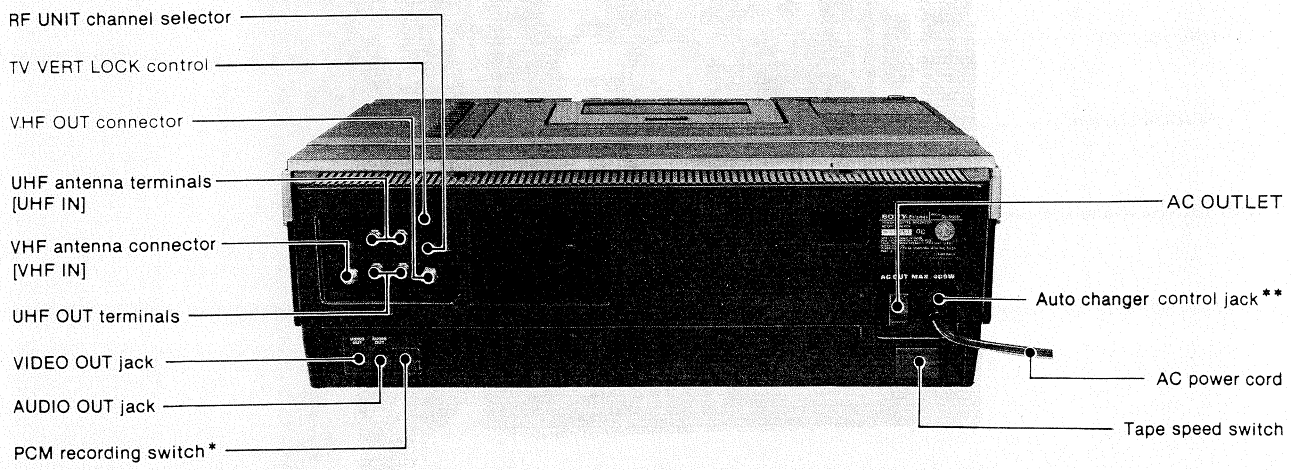
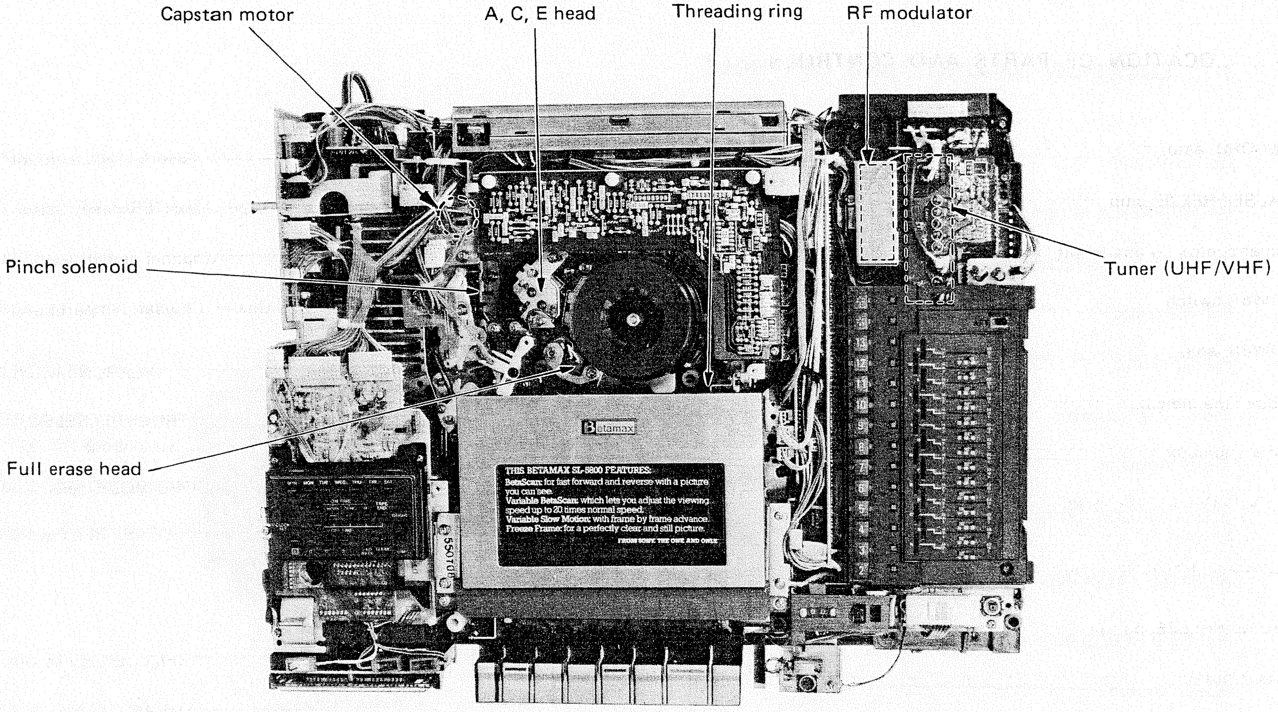
SECTION 1
GENERAL

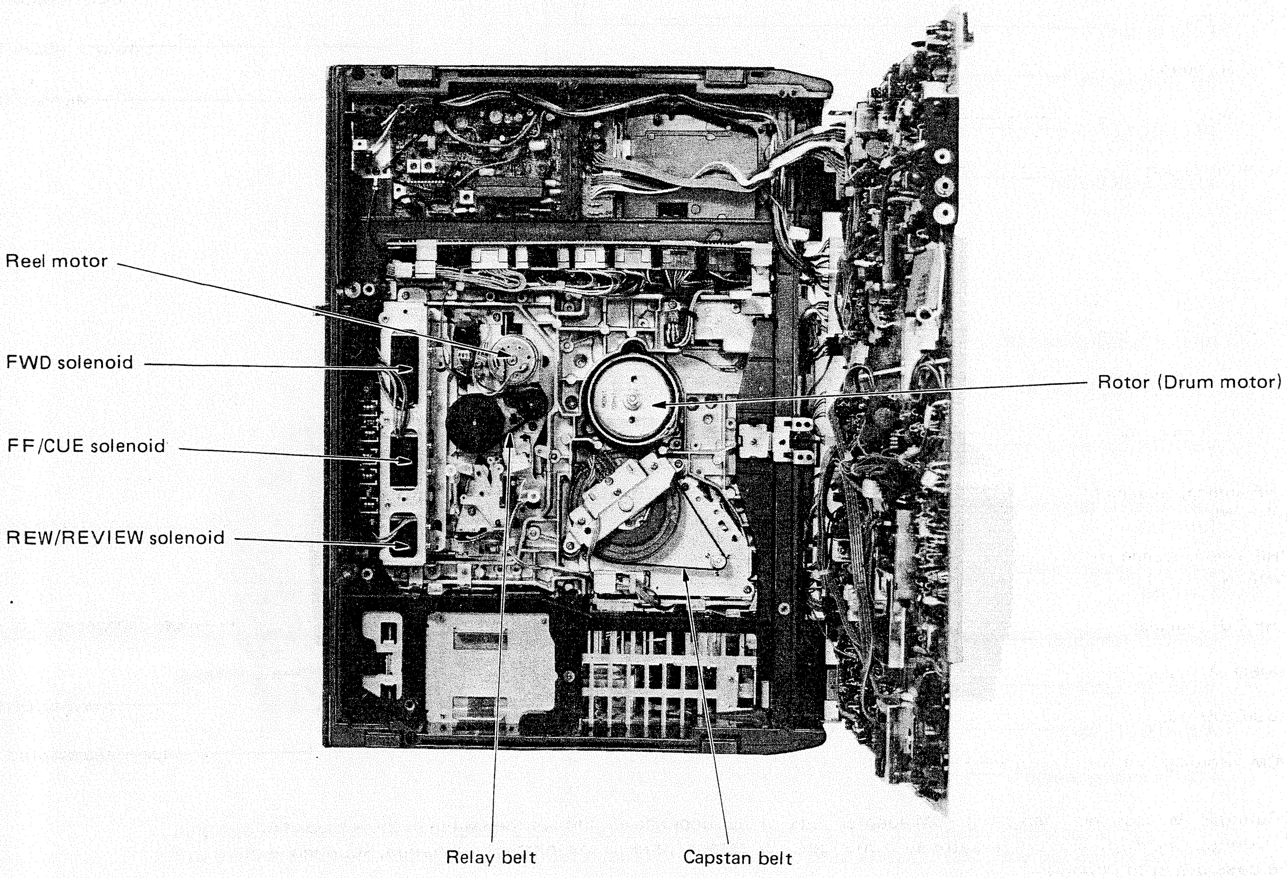
1-1. LOCATION OF PARTS AND CONTROLS


RECORD lamp
PAUSE/FREEZE lamp
Timer control compartment
POWER switch
POWER lamp
Clock time indicator
Timer indicator
SLOW MOTION TRACKING control
NORMAL TRACKING control
PAUSE (FREEZE) button
EJECT button
REWIND (REVIEW) button
STOP button
PLAY button
FF (CUE) button
RECORD button
AUDIO DUB button
Cassette compartment
Tape COUNTER/Reset button
Channel select buttons
Channel preset compartment
SEARCH switch
PROGRAM SELECT switch/lamp
RECORD MODE selector
FAST PLAY button/lamp
REMOTE connector
CAMERA PAUSE jack
CAMERA/TUNER selector
VIDEO IN jack
AUDIO IN jack
MIC jack
SONY
TIME COMMANDER SL-5800

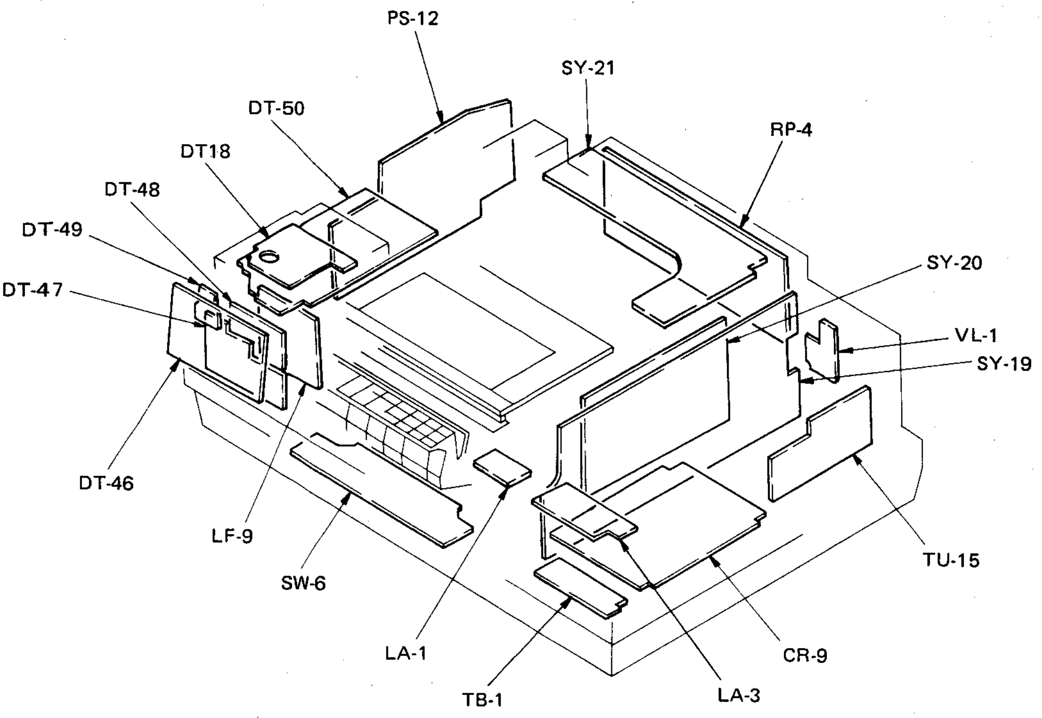

RF UNIT channel selector
TV VERT LOCK control
VHF OUT connector
UHF antenna terminals [UHF IN]
VHF antenna connector [VHF IN]
UHF OUT terminals
VIDEO OUT jack
AUDIO OUT jack
PCM recording switch*
AC OUTLET
Auto changer control jack**
AC power cord
Tape speed switch

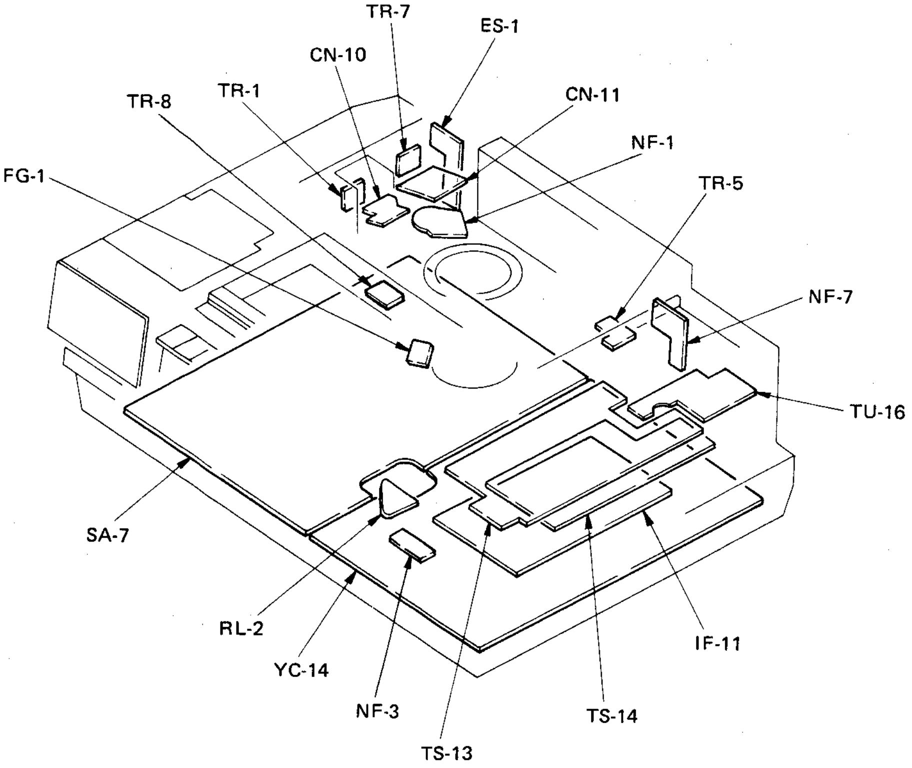
*During PCM recording when using PCM adaptor, remove the rubber cover and set the switch to the left position.
**Connect the Sony AG-300 cassette auto changer. For details, refer to the instruction manual supplied with the cassette auto changer.


Capstan motor
A, C, E head
Threading ring
RF modulator
Pinch solenoid
Tuner (UHF/VHF)
Full erase head

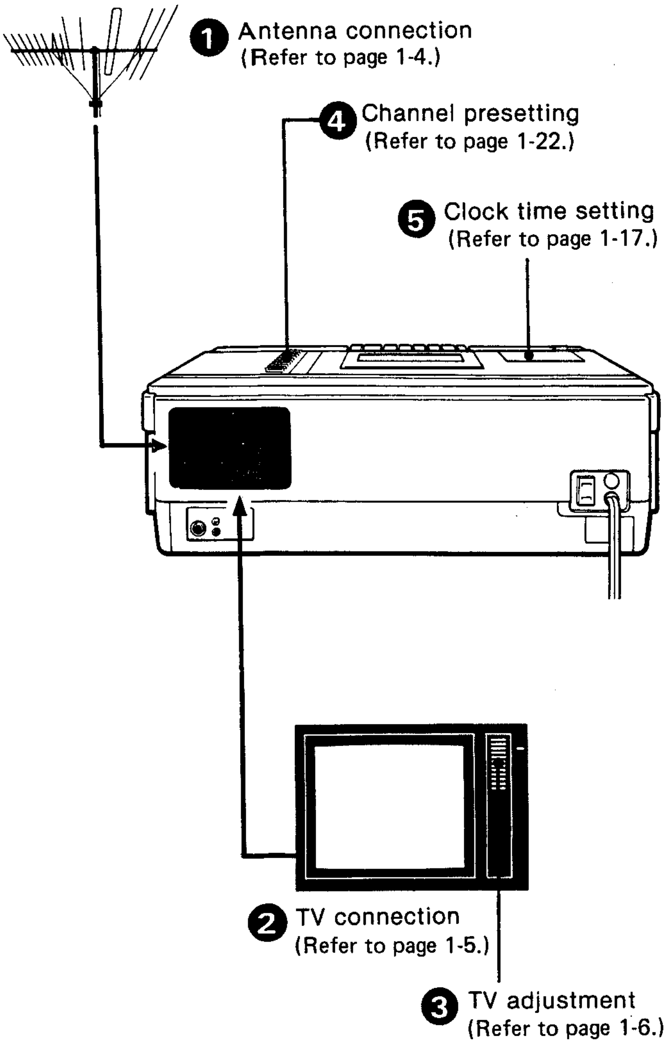

Reel motor
FWD solenoid
FF/CUE solenoid
REW/REVIEW solenoid
Rotor (Drum motor)
Relay belt
Capstan belt

CIRCUIT BOARDS LOCATION


PS-12
SY-21
DT-50
RP-4
DT18
DT-48
DT-49
SY-20
DT-47
VL-1
SY-19
DT-46
LF-9
TU-15
SW-6
LA-1
CR-9
TB-1
LA-3


TR-7
ES-1
CN-10
CN-11
TR-8
TR-1
NF-1
FG-1
TR-5
NF-7
TU-16
SA-7
RL-2
IF-11
YC-14
NF-3
TS-14
TS-13

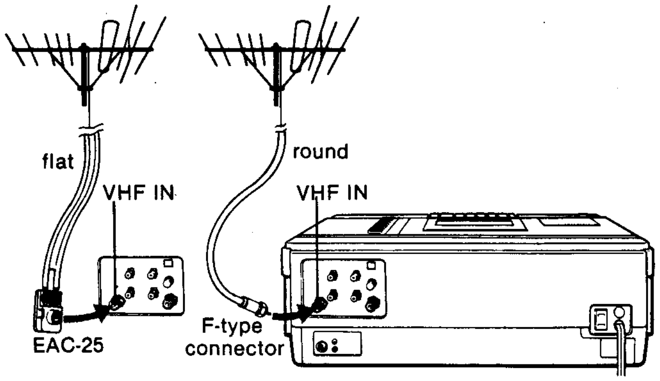
1-2. CONNECTIONS


① Antenna connection
(Refer to page 1-4.)
④ Channel presetting
(Refer to page 1-22.)
⑤ Clock time setting
(Refer to page 1-17.)
② TV connection
(Refer to page 1-5.)
③ TV adjustment
(Refer to page 1-6.)

1-2-1. Antenna Connections

Remove the antenna cables from the TV receiver and connect them to the recorder. The method of connection will depend on the type of your antenna.

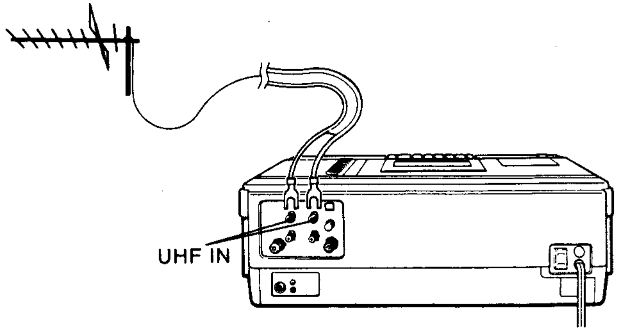
VHF antenna


flat
VHF IN
EAC-25
round
VHF IN
F-type
connector

When the cable is a 75-ohm coaxial type (round)
Connect it to VHF IN with an F-type connector (optional).

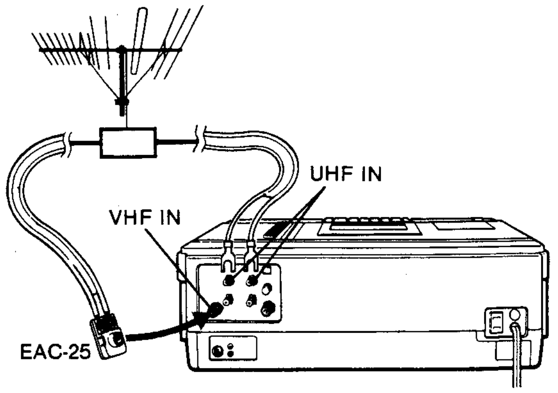
When the cable is a 300-ohm ribbon type lead-in (flat)
Connect it to the EAC-25 (supplied), then connect the EAC-25 to VHF IN.

UHF antenna



Connect the 300-ohm ribbon type lead-in to UHF IN.

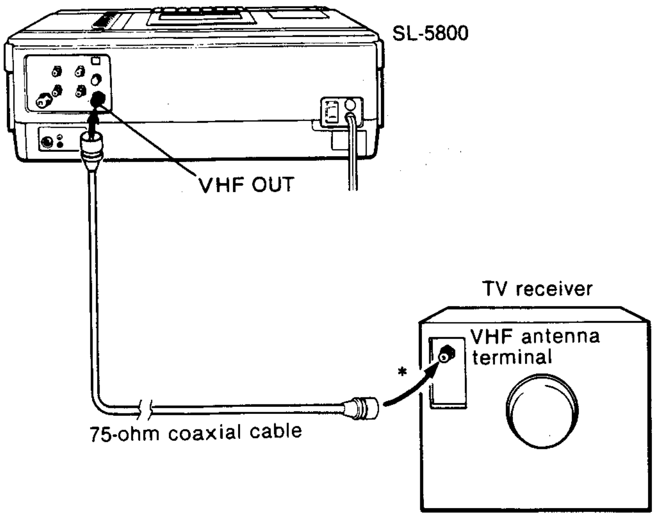
Combination VHF/UHF antenna

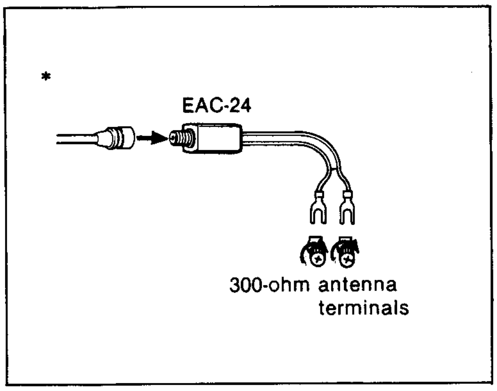

UHF IN
VHF IN
EAC-25

Separate the VHF and UHF signals using a signal splitter, and connect the VHF and UHF wires to VHF IN (through the EAC-25) and UHF IN, respectively.

1-2-2. TV Connections

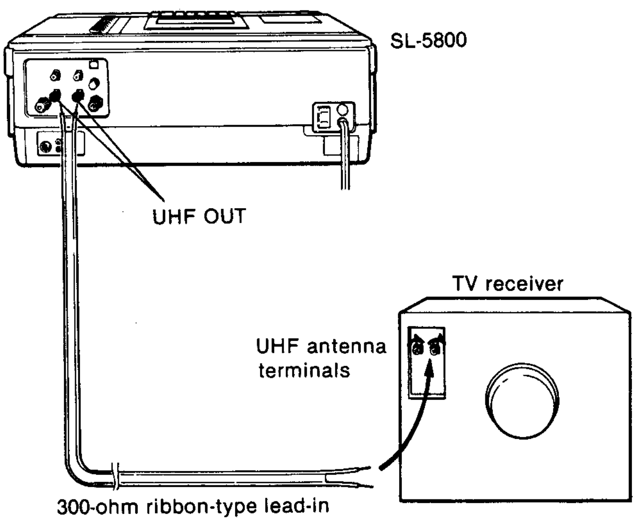
VHF SIGNAL CONNECTION


SL-5800
VHF OUT
TV receiver
VHF antenna terminal
*
75-ohm coaxial cable


*
EAC-24
300-ohm antenna terminals

Connect the VHF OUT connector on the recorder to the VHF antenna terminal on the TV receiver with the 75-ohm coaxial (round) cable supplied. If the TV receiver is equipped with 300-ohm antenna terminals, use the EAC-24 (supplied).

UHF SIGNAL CONNECTION


SL-5800
UHF OUT
TV receiver
UHF antenna terminals
300-ohm ribbon-type lead-in

Connect the UHF OUT terminals on the recorder to the UHF antenna terminals on the TV receiver with the 300-ohm ribbon-type (flat) lead-in supplied.

Caution
Connection between the SL-5800 VHF OUT connector and the antenna terminals of a TV receiver should be made only as shown in these instructions. Failure to do so may result in operation that violates the regulations of the Federal Communications Commission regarding the use and operation of rf devices. Never connect the output of the SL-5800 to an antenna or make simultaneous (parallel) antenna and SL-5800 connections at the antenna terminals of your receiver.

Note
For connections to a cable TV (CATV) system, see page 1-21.

1-2-3. TV Adjustment

In order to use the recorder to play programs on your TV receiver, you have to adjust one channel of your TV receiver to accept the signal from your recorder.

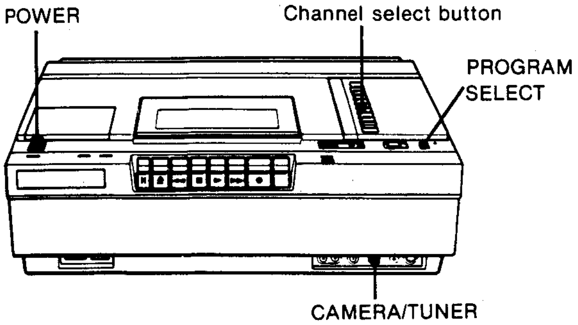
❶ Set the RF UNIT channel selector located at the rear of the recorder to 3 CH or 4 CH, whichever is not active in your area.

❷ If your TV receiver has a rotary or 10 key tuning type channel selector,

set the VHF channel selector to channel 3 or 4 depending on the setting of the RF UNIT channel selector.

If your TV receiver has an electronic tuner,

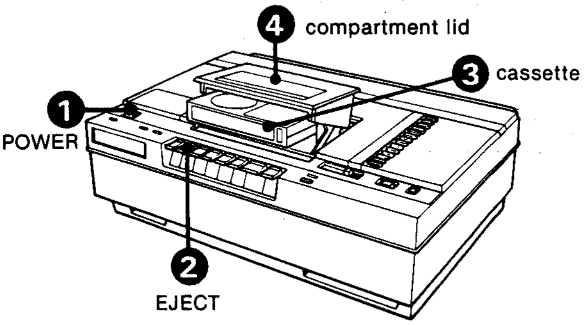
1) Be sure you have connected the recorder, TV receiver and antenna as shown on the previous pages.
2) Turn on the TV.
3) Turn the POWER switch of the recorder ON.
4) Set the CAMERA/TUNER selector to TUNER.
5) Set the PROGRAM SELECT switch to ON VTR.
6) Select an active channel in your area with a channel select button on the recorder.
7) Select an unused TV channel with a channel select button on the TV.
8) Adjust the selected button so that TV program selected on the recorder is clearly displayed on the TV screen and the sound is clearly heard.



● If you have a recorded Betamax video cassette tape, you can tune the TV receiver as follows instead of following the steps 1) to 8) shown previously:

1) Be sure you have connected the recorder, TV receiver and antenna as shown on the previous pages.
2) Turn on the TV.
3) Turn the POWER switch of the recorder ON.
4) Set the CAMERA/TUNER selector to TUNER.
5) Set the PROGRAM SELECT switch to ON VTR.
6) Insert the cassette.
7) Press the PLAY button.
8) Select an unused channel button on the TV.
9) Adjust the selected channel button so that the cassette program is clearly displayed on the TV screen and the sound is clearly heard.

1-2-4. How to Insert and Remove a Cassette



TO INSERT A CASSETTE

❶ Turn on the power switch of the recorder.
❷ Press EJECT.
❸ Insert a cassette into the compartment.
❹ Press down the compartment lid.

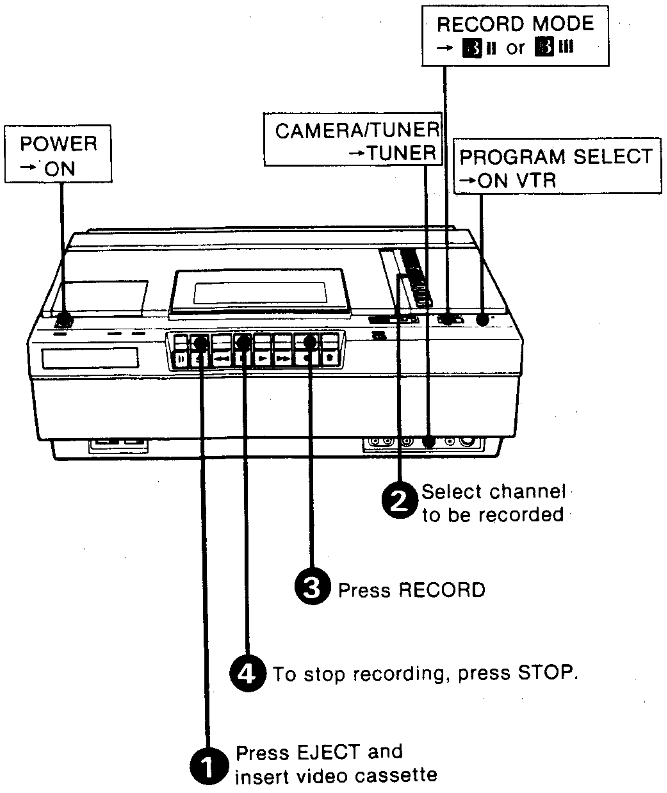
TO REMOVE A CASSETTE

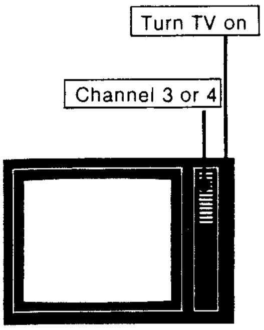
❶ Make sure that the power is turned on and that the recorder is in the stop mode.
❷ Press EJECT.
❸ Remove the cassette.
❹ Press down the compartment lid.

- Do not press the EJECT button while the tape is moving.

1-2-5. How to Record TV Programs

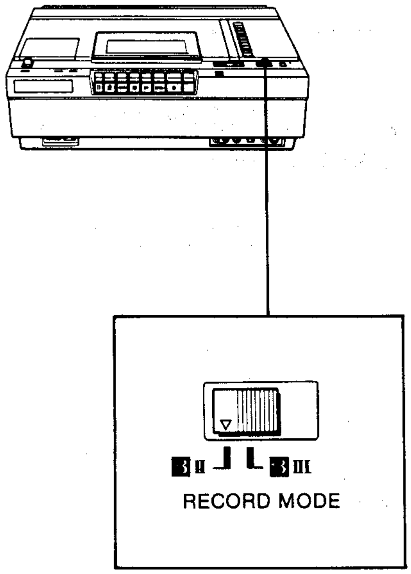
- Make the necessary preparations indicated with ☐ .
- Operate the recorder and TV following sequence of numbers circled.


RECORD MODE
→ βII or βIII
POWER
→ ON
CAMERA/TUNER
→TUNER
PROGRAM SELECT
→ON VTR
❷ Select channel to be recorded
❸ Press RECORD
❹ To stop recording, press STOP.
❶ Press EJECT and insert video cassette


Turn TV on
Channel 3 or 4

- Do not connect any audio source to the MIC jack.

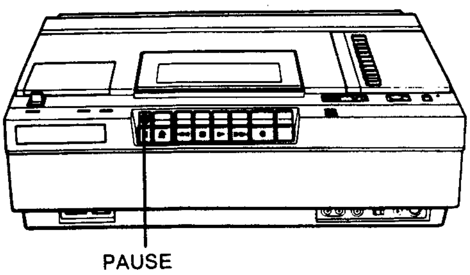
SETTING OF THE RECORD MODE SELECTOR


βII
βIII
RECORD MODE

This switch selects the recording speed (and time) for a video cassette. The βIII format provides one-and-a half times the recording length of the βII format or 4 ½ hours recording (instead of 3 hours in βII mode) with a L-750 cassette.
The position of the RECORD MODE selector does not affect the playback speed. Recorded tapes are played back at the correct speed regardless of the position (βIII or βII) of the selector.

Caution
Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

TO STOP THE TAPE MOMENTARILY DURING RECORDING: PAUSE



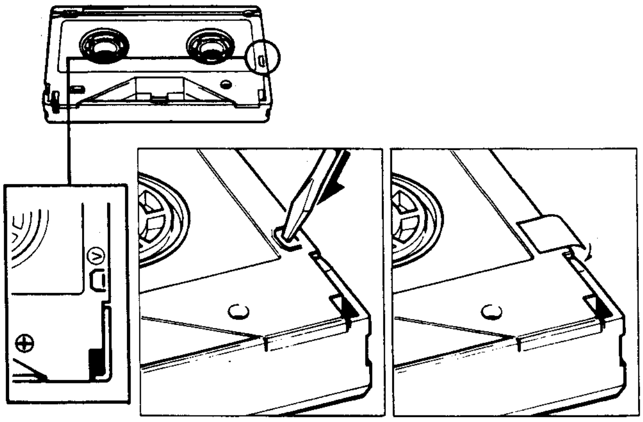
❶ Press the PAUSE button
The PAUSE/FREEZE lamp will light. The pause function is electrically activated so the PAUSE button does not locked in the depressed position.
During the pause mode, you can observe the picture on the TV screen, but the picture will not be recorded.

❷ To resume recording, press this button again.

- After more than about 5 minutes in the pause mode of operation, the pause mode will be automatically released and recording will begin again.
- Recordings made with the use of the PAUSE button may show momentary instability in playback at the point where the PAUSE button was pressed.
- You may also stop the tape momentarily during recording by pressing the PAUSE button on the remote commander βetaScan control unit.
- The channel being recorded can be changed in the pause mode.

IF YOU WANT TO KEEP A RECORDED PROGRAM FROM BEING ACCIDENTALLY ERASED

Break off the tab on the bottom of the video cassette using a screwdriver or similar object. With the tab removed, the RECORD button cannot be pressed, and this will prevent accidental recording over a program you want to keep. If you wish to record on a cassette with the tab removed, cover the hole with a piece of cellophane or vinyl tape.



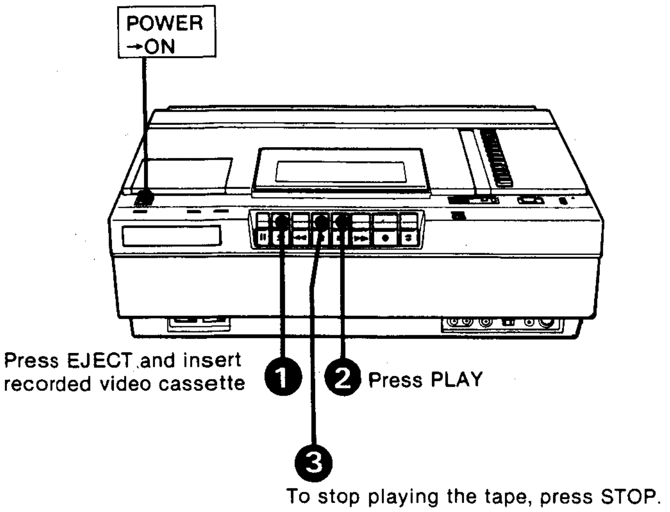
FULL AUTO REWIND

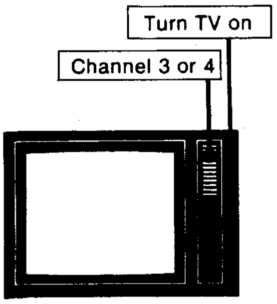
During record, playback or fast forward mode, at the end of the tape, the tape will stop automatically, the RECORD, PLAY or FF button will be released and after several seconds the tape will fully rewind.

- The INDEX position of the SEARCH switch does not function during this rewind, but the MEMORY COUNTER position of this switch functions during this rewind. (For details, about the SEARCH switch, refer to page 1-10.)

1-2-6. How to Play Back a Recorded Tape

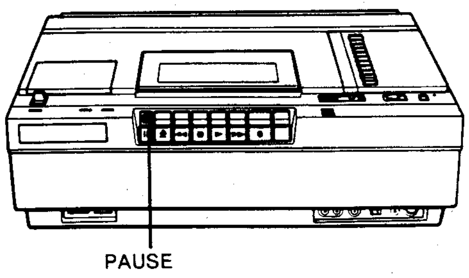
- Make the necessary preparations indicated with ☐ .
- Operate the recorder and TV following sequence of numbers circled.


POWER →ON
Press EJECT and insert recorded video cassette
❶
❷ Press PLAY
❸
To stop playing the tape, press STOP.



- When the PLAY button is pressed, the PROGRAM SELECT switch is automatically set to ON VTR.
- The appropriate playback speed for the βII and βIII formats is automatically selected.

TO STOP THE TAPE MOMENTARILY DURING PLAYBACK: PAUSE



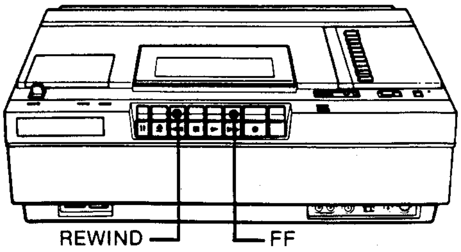
❶ Press the PAUSE button.
The PAUSE/FREEZE lamp will light. The pause function is electrically activated so the PAUSE button is not locked in the depressed position.
During the pause mode, a freeze frame picture will appear on the TV screen.

❷ If a noise band appears in the freeze frame picture, obtain a slow motion picture and adjust the SLOW MOTION TRACKING control until the band disappears. (For details, see page 1-12.)

❸ To resume playback, press the PAUSE button again.

- After more than about 5 minutes in the pause mode of operation, the pause mode will be automatically released, and playback will begin again.

TO MOVE THE TAPE QUICKLY: REWIND, FF (FAST FORWARD)

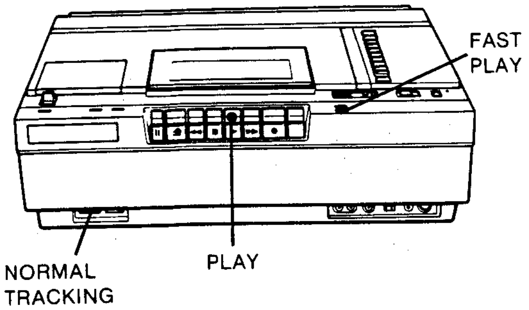


❶ To quickly move the tape forward (fast forward), press the FF button.
To quickly move the tape backward (rewind), press the REWIND button.

❷ To stop the tape, press the STOP button.

- During the fast forward or rewind mode, the picture from the connected video source, such as a TV station or camera, will appear on the TV screen.
- In the fast forward mode, at the end of the tape, the tape will stop automatically, the FF button will be released and after several seconds the tape will rewind. In the rewind mode, when the tape is fully rewound, the recorder will stop automatically and the REWIND button will be released.
- The recorder is designed with "logic control". You can change directly from REWIND or FF to PLAY, from FF to REWIND and from REWIND to FF without pressing STOP in between.

TO GET A TRIPLE SPEED PLAYBACK PICTURE: FAST PLAY



❶ Press the PLAY button.

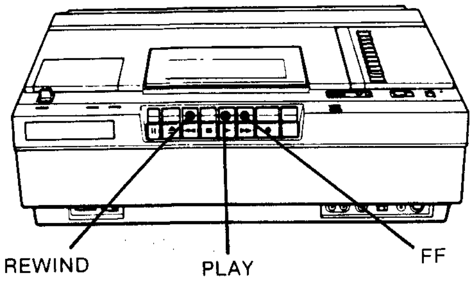
❷ Press the FAST PLAY button.
The playback speed will be three times that of normal playback. The FAST PLAY lamp will light.

❸ If a noise band appears, turn the NORMAL TRACKING control until the best picture is obtained. (See page 1-12.)

❹ To resume normal playback speed, press the FAST PLAY button again.

HOW TO FIND THE SCENE YOU WANT IN A LONG VIDEO CASSETTE

Getting a high-speed forward and reverse picture (Betascan operation)

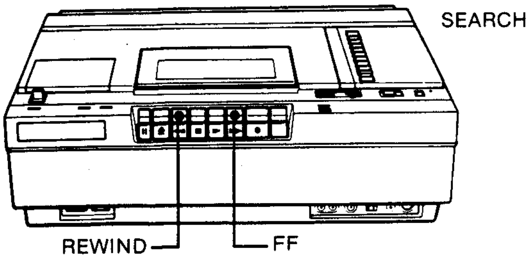


❶ Press the PLAY button.

❷ Press the FF or REWIND button and hold it down.
You will see the forward or reverse picture with high-speed motion on the TV screen.
Streaks may appear in the Betascan playback picture, but this is normal.

❸ At the point where you want to restart normal playback, release the FF or REWIND button.

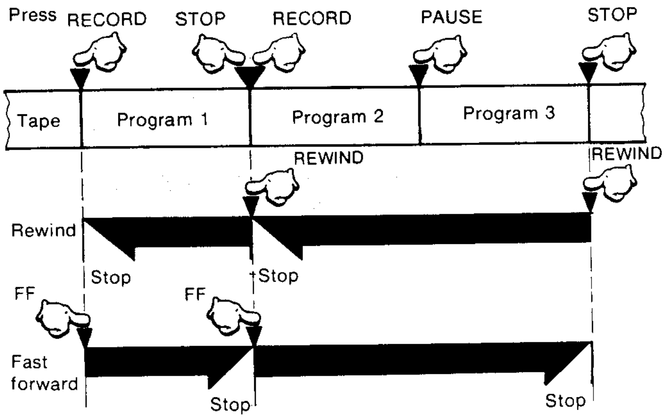
Finding the point where recorded programs begin



❶ Set the SEARCH switch to INDEX.

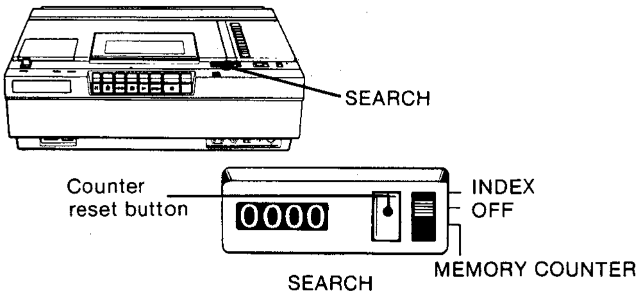
❷ Press the FF or REWIND button.
The tape will stop at the nearest beginning of a program, and the depressed button will be automatically released.

❸ If the program is not the one you want, press the FF or REWIND button again.
The tape will stop at the next beginning of a program.



- This operation is possible because a cue signal is recorded on the tape each time the RECORD button is pressed. The recorder will search for the cue signal during the fast forward or rewind mode and stop when it finds the signal.
- During timer recording, the cue signal will be recorded at every starting point even though the RECORD button is not depressed at that time.
- This mechanism functions when a tape recorded on an SL-5800 or SL-5600 is used.
- There must be at least three minutes of tape at normal playback speed between cue signals. If cue signals are closer together than three minutes, the INDEX function will not operate.
- If you want to rewind the whole tape without stopping, set the SEARCH switch to the OFF position and press the REWIND button.

Finding the point where the tape counter indicates "0000"



The recorder has a tape counter. It displays a number which increases as the tape moves forward and decreases as the tape moves backwards. If you make a note of the number corresponding to a particular point on the tape, you can use the counter to help you relocate that place.
The counter also has a memory facility. To use:

❶ Stop the tape at the point you want to return to later.

❷ Set the SEARCH switch to the MEMORY COUNTER position.

❸ Press the tape counter reset button.
The counter will indicate "0000".

❹ Play or record on the tape.

❺ Press the REWIND button when you want to return to that point.

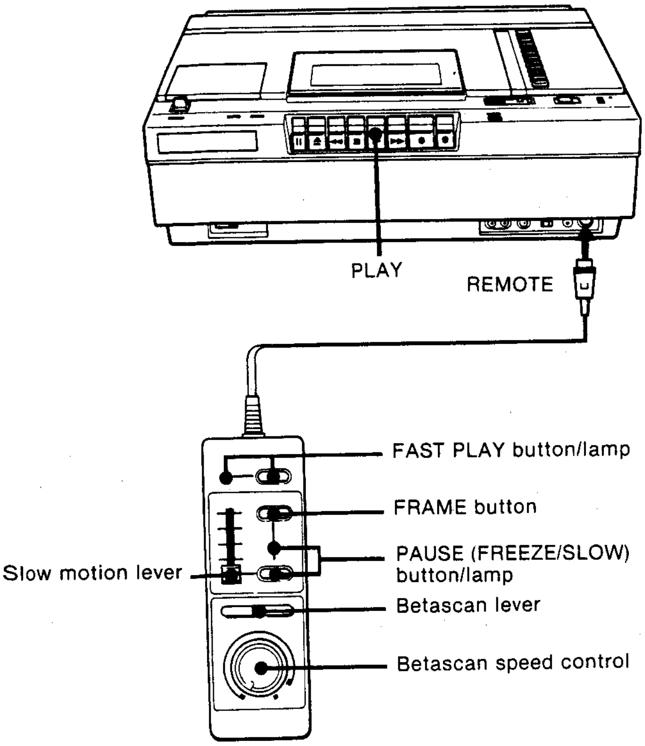
The tape will rewind and stop at a point near the tape counter reading "9999" (one count before "0000" in order to avoid missing the starting point).

- To rewind the tape further than "0000", press the REWIND button again.
- If you want to rewind the whole tape without stopping, set the SEARCH switch to the OFF position and press the REWIND button.

USING THE REMOTE COMMANDER

You can operate the still, variable speed slow motion, frame-by-frame advance, variable speed Betascan and fast play functions from your armchair using the Remote Commander βetaScan Control unit.

Align the plug with the REMOTE connector on the video recorder and insert. Then press the PLAY button.



Remote Commander
βetaScan Control Unit

Getting a freeze picture: PAUSE
❶ Slide the slow motion lever towards you to the FREEZE position.
❷ Press the PAUSE button.
During the pause mode, the PAUSE/FREEZE lamp lights.
❸ If a noise band appears in the freeze picture, obtain a slow motion picture and adjust the SLOW MOTION TRACKING control. (See page 1-12.)
❹ To resume playback, press the PAUSE button again.

Getting a slow motion picture: SLOW
❶ Press the PAUSE button.
❷ Slide the slow motion lever to a position you like. You may vary the playback speed from one thirtieth to one third (at the SLOW position) of normal speed.
❸ If a noise band appears in the picture, adjust the SLOW MOTION TRACKING control. (See page 1-12.)
❹ To resume normal playback speed, press the PAUSE button again.

Advancing the picture one frame at a time: FRAME
❶ Slide the slow motion lever towards you.
❷ Press the PAUSE button.
❸ Press the FRAME button and release it
→ the picture will advance one frame.
or press the FRAME button and hold it down
→ the picture will advance continuously by one frame at a time.
❹ If a noise band appears in the picture, obtain a slow motion picture and adjust the SLOW MOTION TRACKING control. (See page 1-12.)
❺ To resume normal playback speed, press the PAUSE button again.

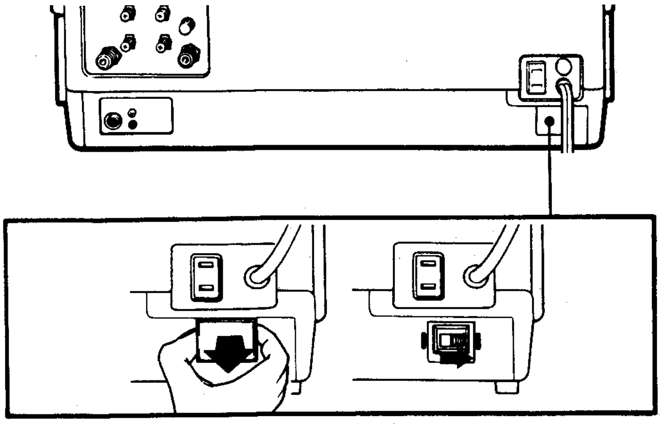
Looking for a particular frame or sequence at high speed foward or reverse: BETASCAN
❶ Press the CUE (FF) side or the REVIEW (REW) side of the BETASCAN lever and hold it down.
You will observe a high-speed forward or reverse picture.
❷ Turn the BETASCAN speed control to the right or left to vary the Betascan playback speed from five times to twenty times normal playback speed. If you turn the control over the MAX position to the FF/REW, the recorder will enter the fast forward or rewind mode and no picture will appear on the screen.
❸ At the point where you want to resume normal playback speed, release the lever.

- During slow motion, the recorder will enter the speed search mode when the CUE or REVIEW side of the BETASCAN lever is pressed. When the lever is released, the recorder will return to the slow motion mode.

Viewing a triple speed playback picture: FAST PLAY
❶ Press the FAST PLAY button.
❷ If a noise band appears, adjust the NORMAL TRACKING control. (See page 1-12.)
❸ To resume normal playback speed, press the FAST PLAY button again.

- After the fast playback is finished, return the NORMAL TRACKING control to the center detent position.

TO PLAY BACK TAPES RECORDED IN THE βI FORMAT



You may play back tapes recorded in the βI format with this recorder. To do this

❶ Remove the plastic cover at the rear. You will find a tape speed switch.

❷ Set the switch to the βI position.

❸ When playback of this particular tape is finished, reset the switch to its original position (βII/βIII).

- During playback of a tape recorded in the βI format, the Betascan operation and fast play do not function, and a freeze picture cannot be obtained in the pause mode.

IF STREAKS OR SNOW APPEAR IN THE PLAYBACK OF TAPES OR IN THE FAST PLAY PICTURE

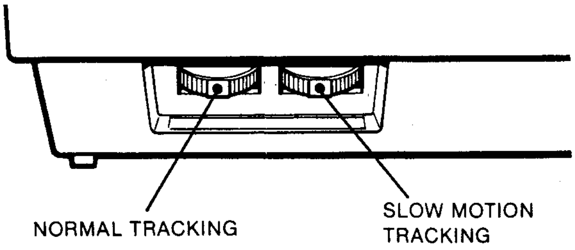
Turn the NORMAL TRACKING control first in one direction, then in the other, until you get the best possible picture. Allow a second or two for the new settings to take effect. When playback of this particular tape or the fast play is finished, return the NORMAL TRACKING control to its center detent position.

IF A NOISE BAND APPEARS IN THE PAUSE, FRAME-BY-FRAME OR SLOW MOTION PICTURE

❶ Make sure you have connected the βetaScan control unit and obtain a slow motion picture. (To get to a slow motion picture from a freeze picture, slide the slow motion lever away from you.)

❷ Watching the slow motion picture, turn the SLOW MOTION TRACKING control until you get the best possible picture.

❸ Return the recorder to the previous mode or continue in slow motion, as desired.

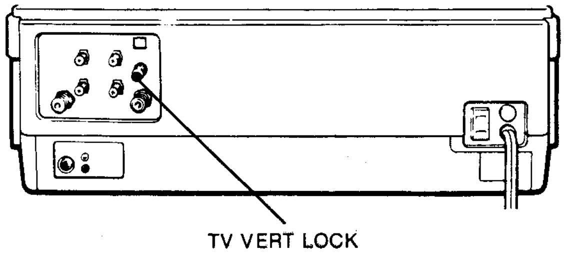


IF A VERTICAL JITTER APPEARS IN THE PAUSE, FRAME-BY-FRAME OR SLOW MOTION PICTURE

❶ Obtain a freeze picture. (To get a freeze picture from slow motion picture, slide the slow motion lever on the βetaScan control unit toward you to the FREEZE position.)

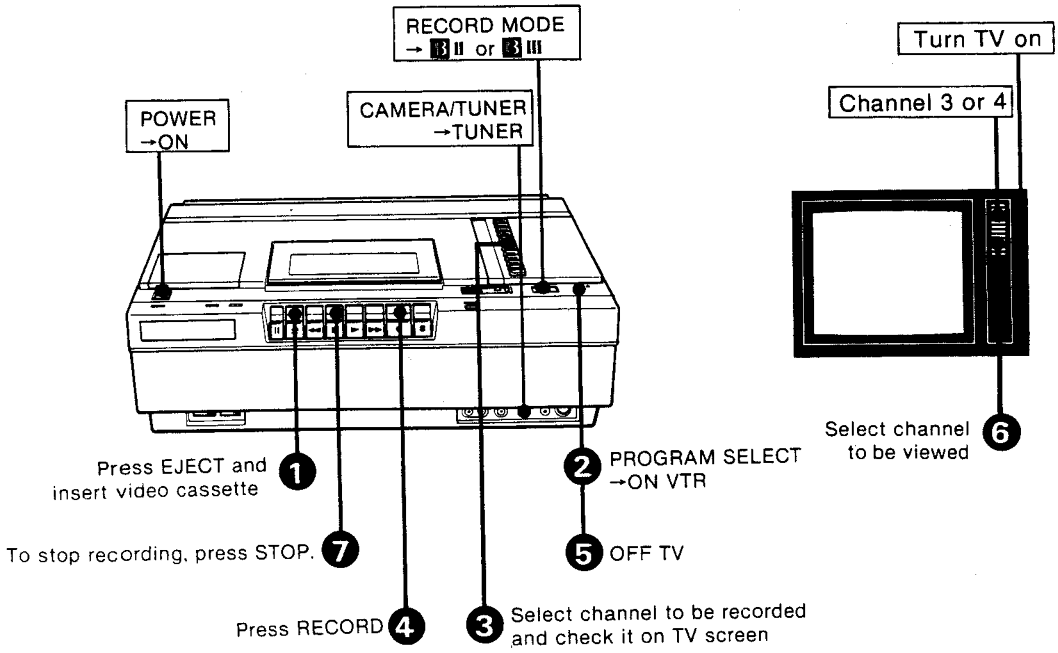
❷ Watching the freeze picture, adjust the TV VERT LOCK control for the best possible picture.

❸ Return the recorder to the previous mode.



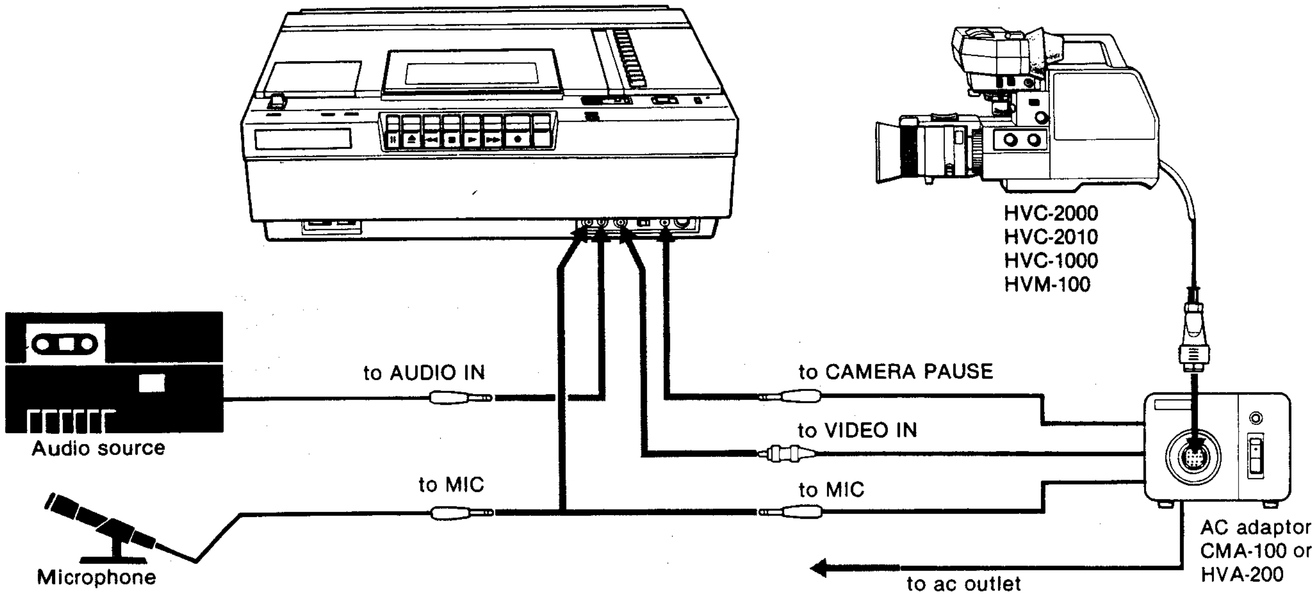
- Once you adjust the TV VERT LOCK control, you do not have to adjust it again unless you change the connected TV receiver.

1-2-7. How to Record one TV Program While Viewing Another


RECORD MODE
→ β II or β III
Turn TV on
Channel 3 or 4
POWER
→ON
CAMERA/TUNER
→TUNER
Select channel to be viewed ⑥
Press EJECT and insert video cassette ①
② PROGRAM SELECT →ON VTR
To stop recording, press STOP. ⑦
⑤ OFF TV
Press RECORD ④
③ Select channel to be recorded and check it on TV screen

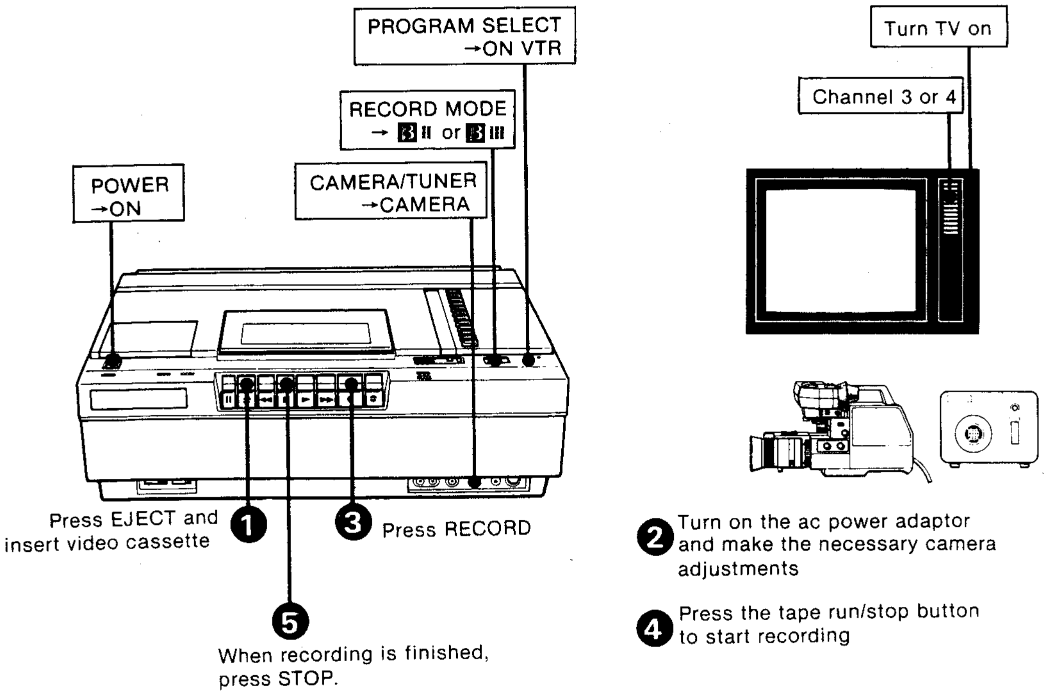
1-2-8. How to Use Your Recorder for Camera Recording

CONNECTIONS


HVC-2000
HVC-2010
HVC-1000
HVM-100
to AUDIO IN
to CAMERA PAUSE
Audio source
to VIDEO IN
to MIC
to MIC
Microphone
AC adaptor
CMA-100 or
HVA-200
to ac outlet

- Cameras connected must conform to American TV (EIA) standards.
- Plug a microphone into the MIC jack or plug any other audio source into the AUDIO IN jack. If both a microphone and another source are connected, the tape will record only the microphone's input.

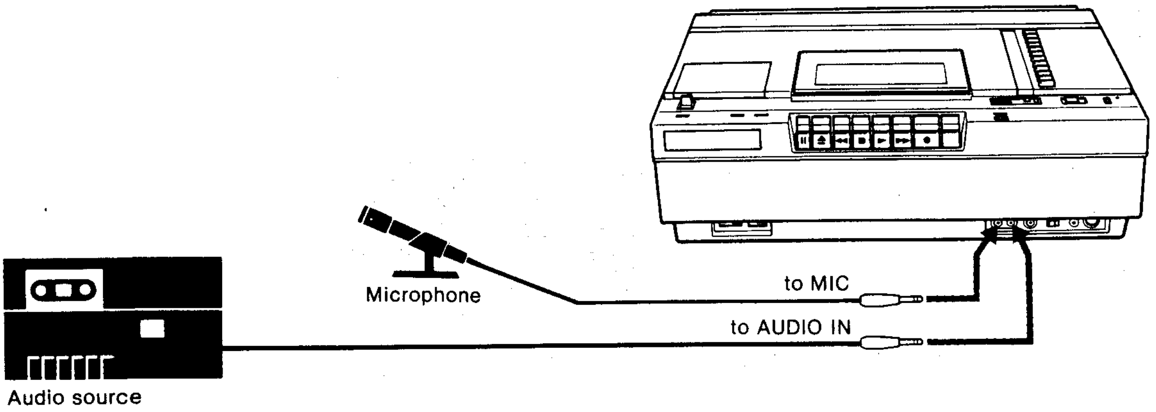
OPERATION


PROGRAM SELECT
→ON VTR
Turn TV on
RECORD MODE
→ βII or βIII
Channel 3 or 4
POWER
→ON
CAMERA/TUNER
→CAMERA
Press EJECT and
insert video cassette
❶
❸
Press RECORD
❷
Turn on the ac power adaptor
and make the necessary camera
adjustments
❺
When recording is finished,
press STOP.
❹
Press the tape run/stop button
to start recording

- When the HVC-2000, HVC-2010, HVC-1000 or HVM-100 is used, you may start and stop recording using the remote control switch on the camera. When you connect other cameras, we recommend that you use the PAUSE button on the BetaScan control unit.
- For details about camera recording, refer to the instruction manual supplied with the camera.

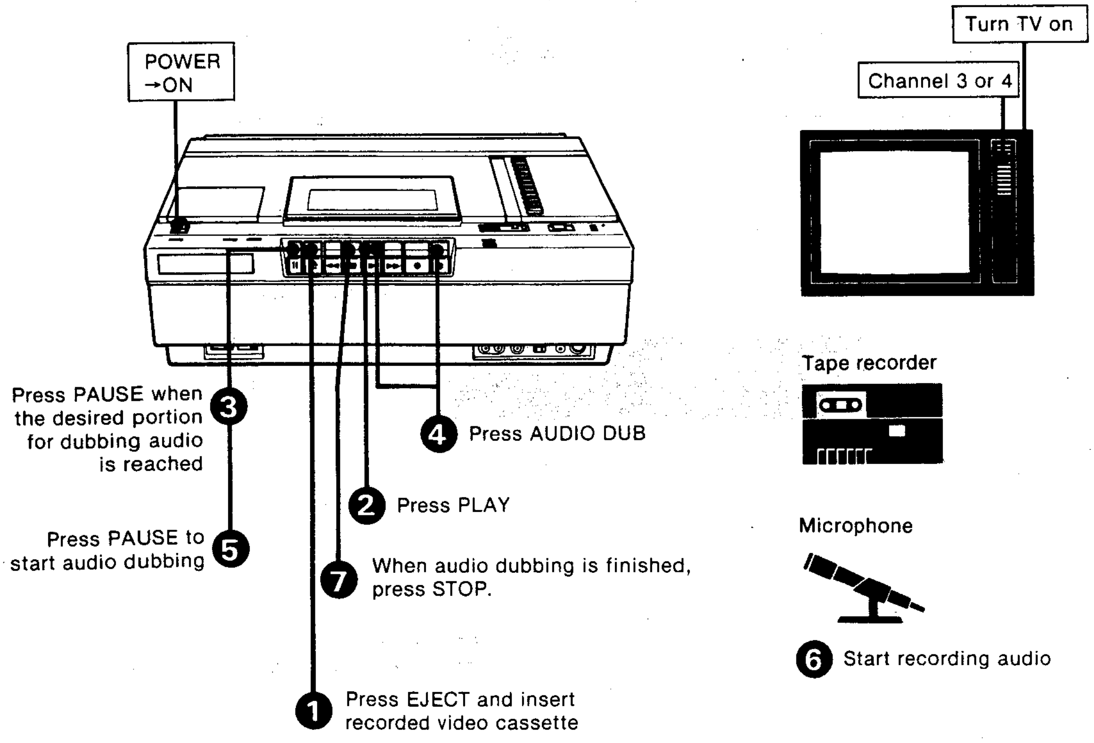
1-2-9. How to Dub Audio Onto a Previously Recorded Tape

CONNECTIONS


Microphone
to MIC
to AUDIO IN
Audio source

- If both a microphone and another audio source are connected, the tape will record only the microphone's input.

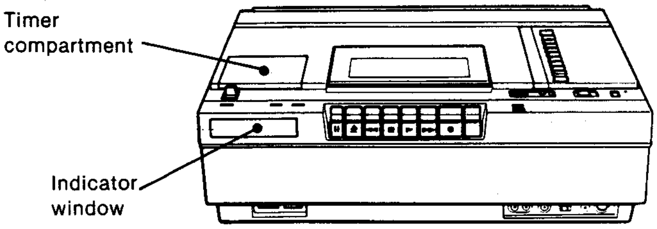
OPERATION

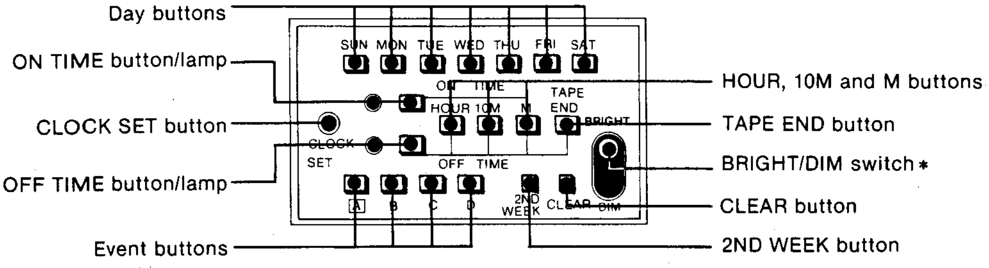

POWER →ON
Turn TV on
Channel 3 or 4
Tape recorder
Microphone
③ Press PAUSE when the desired portion for dubbing audio is reached
④ Press AUDIO DUB
② Press PLAY
⑤ Press PAUSE to start audio dubbing
⑦ When audio dubbing is finished, press STOP.
⑥ Start recording audio
① Press EJECT and insert recorded video cassette

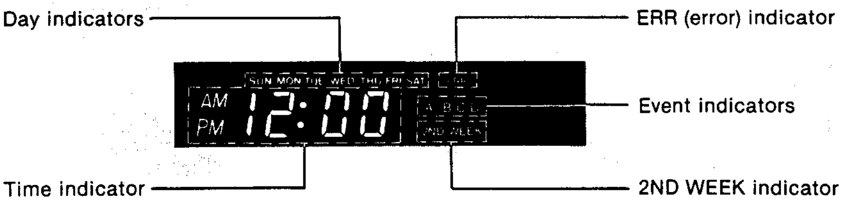
- TV volume should be turned down to prevent acoustic feedback (whistle-like sounds).
- When dubbing from the beginning of the tape, press the PLAY button first, then press the AUDIO DUB button.

1-2-10. How to Record Using the Timer

Using the timer, recordings of up to four events occurring within two weeks can be made automatically even when you are not at home. For timer recording, you have to set the clock time first and then you have to set the timer: turn-on time, day and turn-off time. Open the lid of the timer compartment, for access to the buttons and lamps you will use to make the necessary settings.


Timer compartment
Indicator window

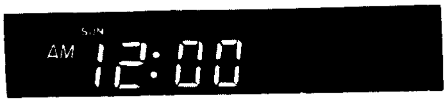

Day buttons
ON TIME button/lamp
CLOCK SET button
OFF TIME button/lamp
Event buttons
SUN MON TUE WED THU FRI SAT
ON TIME
HOUR 10M M
TAPE END
BRIGHT
CLOCK SET
OFF TIME
A B C D
2ND WEEK
CLEAR
DIM
HOUR, 10M and M buttons
TAPE END button
BRIGHT/DIM switch*
CLEAR button
2ND WEEK button


Day indicators
Time indicator
SUN MON TUE WED THU FRI SAT
ERR
AM
PM
12:00
A B C D
2ND WEEK
ERR (error) indicator
Event indicators
2ND WEEK indicator

*** BRIGHT/DIM switch**
Select the brightness of the time indicator, BRIGHT or DIM.

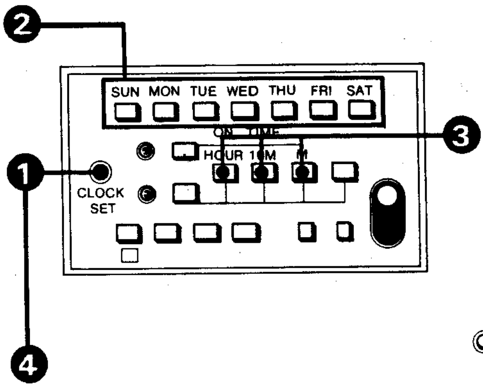
TO SET THE CLOCK TIME

When the recorder is plugged in, the indicator window will show



and the dots will blink.

The clock time must first be set to the correct day and time of day. Open the timer control compartment to expose the controls and follow the steps.

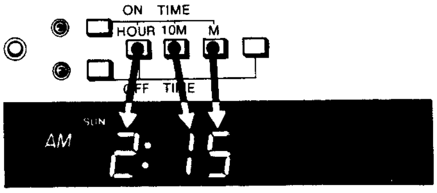


❷ Depress the Day button of today.

❶ Depress the CLOCK SET button.
This button should be depressed continuously from step ❷ through step ❸.

❸ Depress the HOUR, 10M and M buttons until the clock time indicator shows the present time.

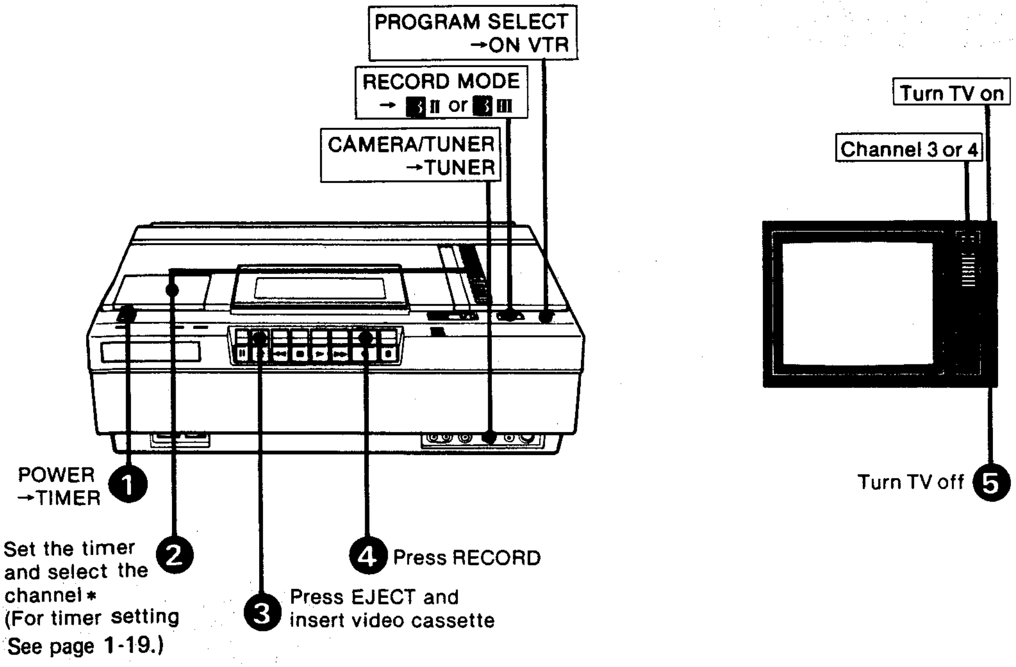
❹ Release the CLOCK SET button at a time signal from a broadcast or telephone.
The clock time is now set and will maintain the correct present time.



- In step ❸, first keep the button depressed to advance the digits, then push it and release it immediately as the desired indication approaches.
- You may have to go through a complete 12 hour period to set the correct AM or PM period. "PM 12:00" indicates noon; "AM 12:00" indicates midnight.
- Whenever the CLOCK SET button is depressed, the clock is set back to 0 second of the current minute; when released, the clock begins to operate. Avoid unnecessary pressing of this button as it may result in a retarded clock setting.
- When the CLOCK SET button is released, the upper dot begins blinking; after 30 seconds, the upper dot stops blinking and the lower dot blinks.
- The clock time and the timer settings are maintained when power is interrupted or the ac power cord is disconnected for less than 10 minutes. (The recorder must have been plugged in for at least 30 hours before a power interruption if the power-backup battery is to function.)

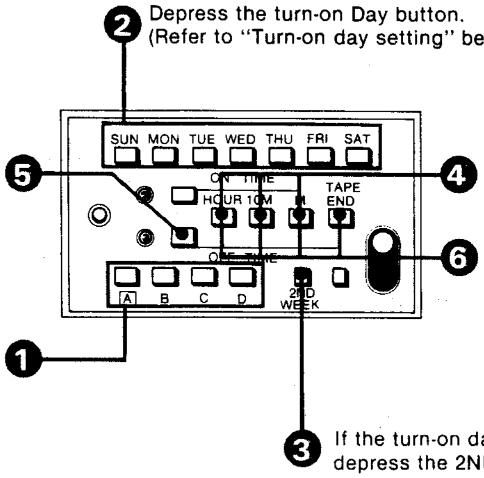
For details, see page 1-20.

OPERATION


PROGRAM SELECT
→ON VTR
RECORD MODE
→ II or III
CAMERA/TUNER
→TUNER
Turn TV on
Channel 3 or 4
POWER
→TIMER ❶
Set the timer and select the channel * (For timer setting See page 1-19.) ❷
❸ Press EJECT and insert video cassette
❹ Press RECORD
Turn TV off ❺

- After the tape has run out, the recorder will shut off automatically and be turned off after about 30 seconds.
- To remove the videocassette, first set the POWER switch to ON, then press the EJECT button. If the tape is not recorded to its end, be sure to press the STOP button before the EJECT button.
- While timer recording, the channel cannot be changed.

TO SET THE TIMER



② Depress the turn-on Day button. (Refer to "Turn-on day setting" below.)

⑤ Depress the OFF TIME button.

④ Depress the HOUR, 10M and M buttons to set the turn-on time.

⑥ Depress the HOUR, 10M and M buttons to set the turn-off time. When you want to record to the tape end, depress the TAPE END button.

① Depress one of the Event buttons. This button should be depressed from step ② through step ⑦.

③ If the turn-on day is more than 7 days ahead, depress the 2ND WEEK button. (For details, see below.)

⑦ Depress the appropriate Channel select Button on the recorder.
⑧ Release the Event button.
The clock time and day will be displayed.
⑨ If you want to set the timer to record another event, repeat steps ① to ⑧ using another Event button.

Turn-on day setting

The turn-on day may be set for a particular day of the week or for every day. The indicator will light to indicate the turn-on day.

	Day indicator
An Event button is depressed. Recording will be started every day at the same setting time.	$\boxed{\text{SUN}}$ $\boxed{\text{MON}}$ $\boxed{\text{TUE}}$ $\boxed{\text{WED}}$ $\boxed{\text{THU}}$ $\boxed{\text{FRI}}$ $\boxed{\text{SAT}}$
If you want to start recording on Wednesday, depress the WED button.	SUN MON TUE $\boxed{\text{WED}}$ THU FRI SAT
If you want to change the turn-on day to Tuesday, depress the TUE button.	SON MON $\boxed{\text{TUE}}$ WED THU FRI SAT
If you want to change the turn-on day to every day, depress the Day button whose indicator is lighting.	$\boxed{\text{SUN}}$ $\boxed{\text{MON}}$ $\boxed{\text{TUE}}$ $\boxed{\text{WED}}$ $\boxed{\text{THU}}$ $\boxed{\text{FRI}}$ $\boxed{\text{SAT}}$

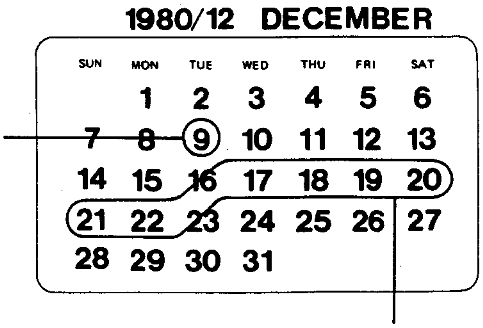
- An everyday setting on an Event button will be memorized until you reset or clear it. Recording will be started everyday at the same setting time.

If you want to record an event occurring at the same hour on consecutive weeks

Set the timer of the event on Event button A. A one day setting on Event button A will be memorized and the recording will be repeated every week. One day settings on Event buttons B, C and D will be cleared after the recording is made.

When to use the 2ND WEEK button

Suppose you were setting the timer on Tuesday, December 9 at 10:00 a.m.



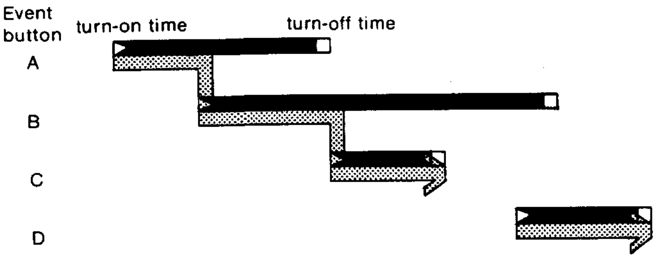
Suppose you are setting the timer on this day at 10:00 a.m.

Depress the 2ND WEEK button for recordings to be made on these days: from 10:01 a.m on 16th to 10:00 a.m. on 23th.

When the Event indicators and ERR lamp blink

This means that the timer settings on more than two Event buttons are overlapped. Check and reset the timer settings. If recording starts with the lamps blinking, it will proceed according to the illustration. If the same turn-on day and time is set on several buttons, the priority is A, B, C and D.

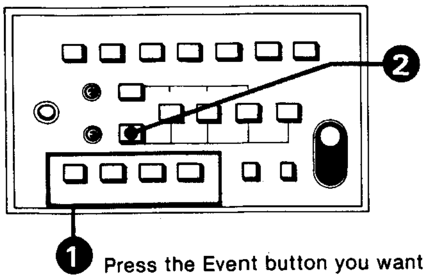
- When the turn-off time of the overlapped buttons is the tape end, the lamps do not blink.



▶■ The time which has been set on a Event button

⇨ Recording will be made following these instructions.

TO CHECK THE TIMER SETTING OF AN EVENT



❷ Depress the OFF-TIME button.
The turn-off time will be displayed in the indicator window.

❶ Press the Event button you want to check, and hold it down.
The turn-on setting will be displayed in the indicator window. The channel indicator will also light.

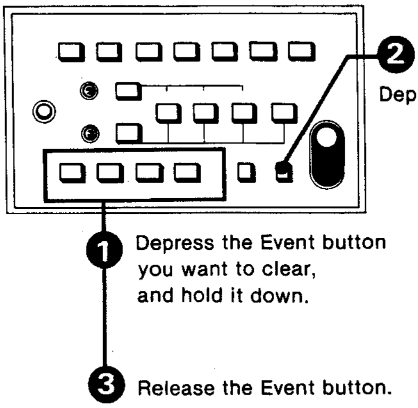
❸ Release the Event button.

- If the turn-off time is displayed and you want to check the turn-on time, hold the Event button down and press the ON-TIME button.

When "--:--" is displayed

The timer setting has not been made. Set a turn-on or turn-off time. If a turn-off time is not set, recording will continue to the tape end.

TO CLEAR THE TIMER SETTING ON AN EVENT BUTTON



❷ Depress the CLEAR button.
The timer settings will be cleared.

❶ Depress the Event button you want to clear, and hold it down.

❸ Release the Event button.

WHEN THE DOTS BETWEEN THE HOUR AND MINUTES FIGURES BLINK QUICKLY

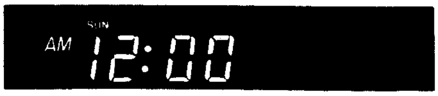
The setting of the clock time and timer are required since the recorder was plugged in or the power interruption has occurred. This machine has a power backup battery which maintains the clock and timer settings during a power interruption for less than ten minutes. For the battery to operate, power has to be supplied to the recorder for more than 30 hours before the power interruption.

If a power interruption of less than 10 minutes has occurred.

The clock time and timer settings will be maintained. Press the CLOCK SET button to stop the dots blinking. It may be a good idea to check the clock time, timer and the channel to be recorded.
If the power interruption has occurred during timer recording, the recording is stopped and will be started when the power is resupplied.

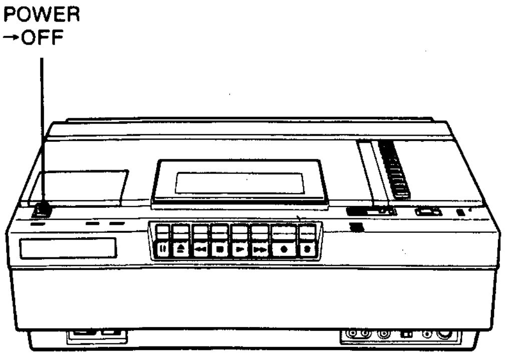
If a power interruption of more than 10 minutes has occurred.

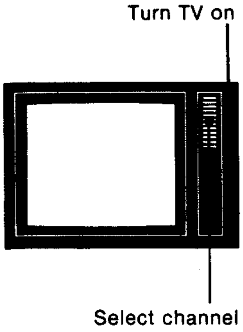
The clock time and timer settings will be cleared. When the power is resupplied, the clock time will indicate



The dots blink and recording will not start. Set the clock time, timer and the channel to be recorded.

1-2-11. How to Watch Television when the Recorder is Connected




Turn TV on
Select channel

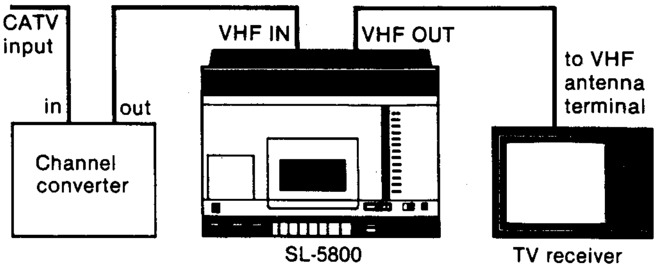
You can also view the TV using the tuner built into the SL-5800 according to the following procedure.

➊ Set the recorder POWER switch to ON.
➋ Set the PROGRAM SELECT switch to ON VTR.
➌ Set the channel selector of the TV to channel 3 or 4.
➍ Select the desired channel using the SL-5800 channel select button.

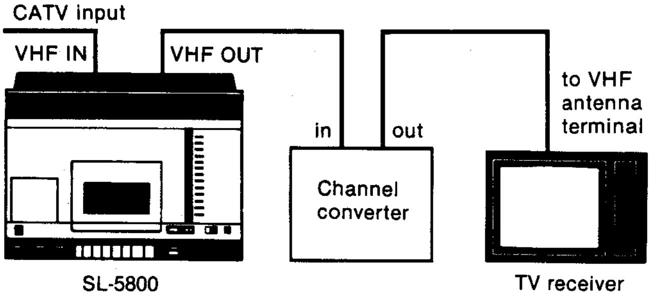
- With this procedure, you can start the recording of a TV program by merely pressing the RECORD button.
- The distance between the SL-5800 and the TV may be extended using an RFC-8 Extension Cable (optional).

CONNECTIONS TO A CABLE TV (CATV) SYSTEM

- It is recommended that you consult with your cable television company for proper connection of your Betamax unit to your cable TV system.
- Before operating the recorder with a cable-TV system, set the RF UNIT channel selector on the recorder to channel 3 or 4, whichever is not active in your area. If both channels are viewable, check which gives better results by switching between channels 3 and 4.


CATV input
in
out
Channel converter
VHF IN
VHF OUT
to VHF antenna terminal
SL-5800
TV receiver

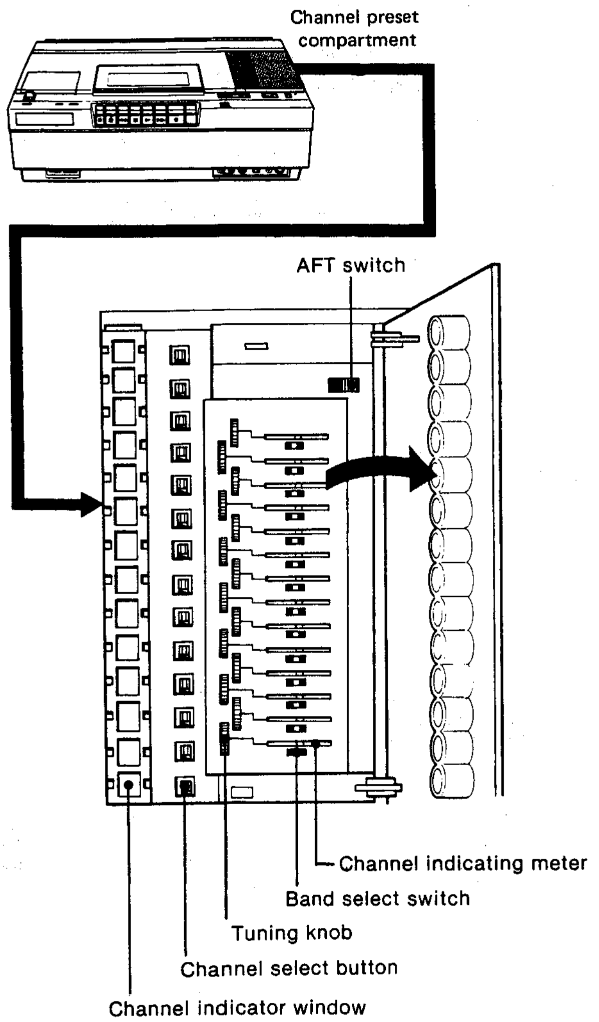
In the above configuration, you can record programs from all CATV channels as well as VHF channels 2 through 13.
Set the TV channel selector to that of the RF UNIT channel selector. Set the channel select button on the recorder to receive the output channel of the converter. Set the PROGRAM SELECT switch on the recorder to the VTR position.
With this connection, the channel to be viewed or to be recorded is selected on the converter.


CATV input
VHF IN
VHF OUT
in
out
Channel converter
to VHF antenna terminal
SL-5800
TV receiver

In this configuration, you can view one program from the converter while recording a program on VHF channels 2 through 13 via the recorder. Set the TV channel selector to the output channel of the converter and the PROGRAM SELECT switch to TV.
For playback, set the channel selector on the converter to that of the RF UNIT channel selector.
When channel converter is not used, connect the CATV input to the recorder, then connect the recorder and the TV receiver as shown in the previous TV connection diagrams.

TO PRESET THE RECORDER TO THE TV STATIONS IN YOUR AREA

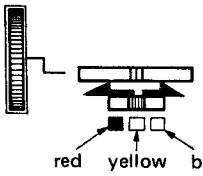
The channel select buttons marked A through N are pre-adjusted at the factory to VHF channel 2–13 and two UHF channels. These pre-adjusted channels may be set up to receive any local station, VHF or UHF.
Once preset, you may select any channel just by pressing the channel select button on the top panel. The recorder will stay preset even if the power to the recorder is disconnected.


Channel preset compartment
AFT switch
Channel indicating meter
Band select switch
Tuning knob
Channel select button
Channel indicator window

❶ Make sure of the following:
- a) that the VHF and UHF antenna and the TV receiver are connected. (See page 1-4 and 1-5.)
- b) that your recorder is plugged in.
- c) that your TV receiver and recorder are turned on.
- d) that the CAMERA/TUNER is set to TUNER.
- e) that the PROGRAM SELECT switch is set to ON VTR.
- f) that the TV receiver is set to channel 3 or 4.

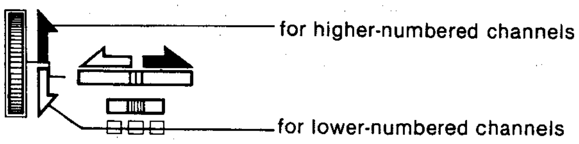
❷ Open the channel preset compartment.
❸ Set the AFT switch to OFF.
❹ Push the channel select button on the recorder to be preset. The associated channel indicator will light.

❺ Set the band select switch associated with the pushed button (if button A is pushed, use switch A) to one of the three color-coded positions:


red
yellow
blue

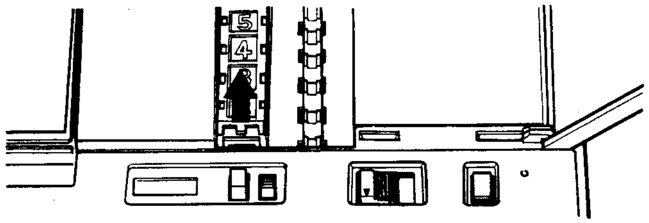
to tune in channels 2 through 6, set to red.
to tune in channels 7 through 13, set to yellow.
to tune in channels 14 through 83, set to blue.

❻ Turn the tuning knob watching the TV screen.

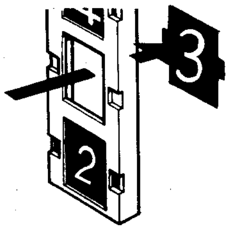

for higher-numbered channels
for lower-numbered channels

When the picture appears, slowly turn the tuning knob in the opposite direction until a herringbone pattern appears in the colored part of the picture, then turn the knob back until the herringbone pattern just disappears and the picture is clear.
The channel indicating meter will show you the approximate channel.

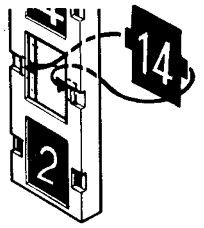
❼ Repeat steps ❹, ❺ and ❻ for the other channel select buttons. To identify the channels, consult a newspaper or TV program guide.
❽ Set the AFT switch to ON when all stations have been set up as desired.
❾ Remove the channel number sheet from the channel indicator window.



❿ Remove the number segment by pressing it out from the front.



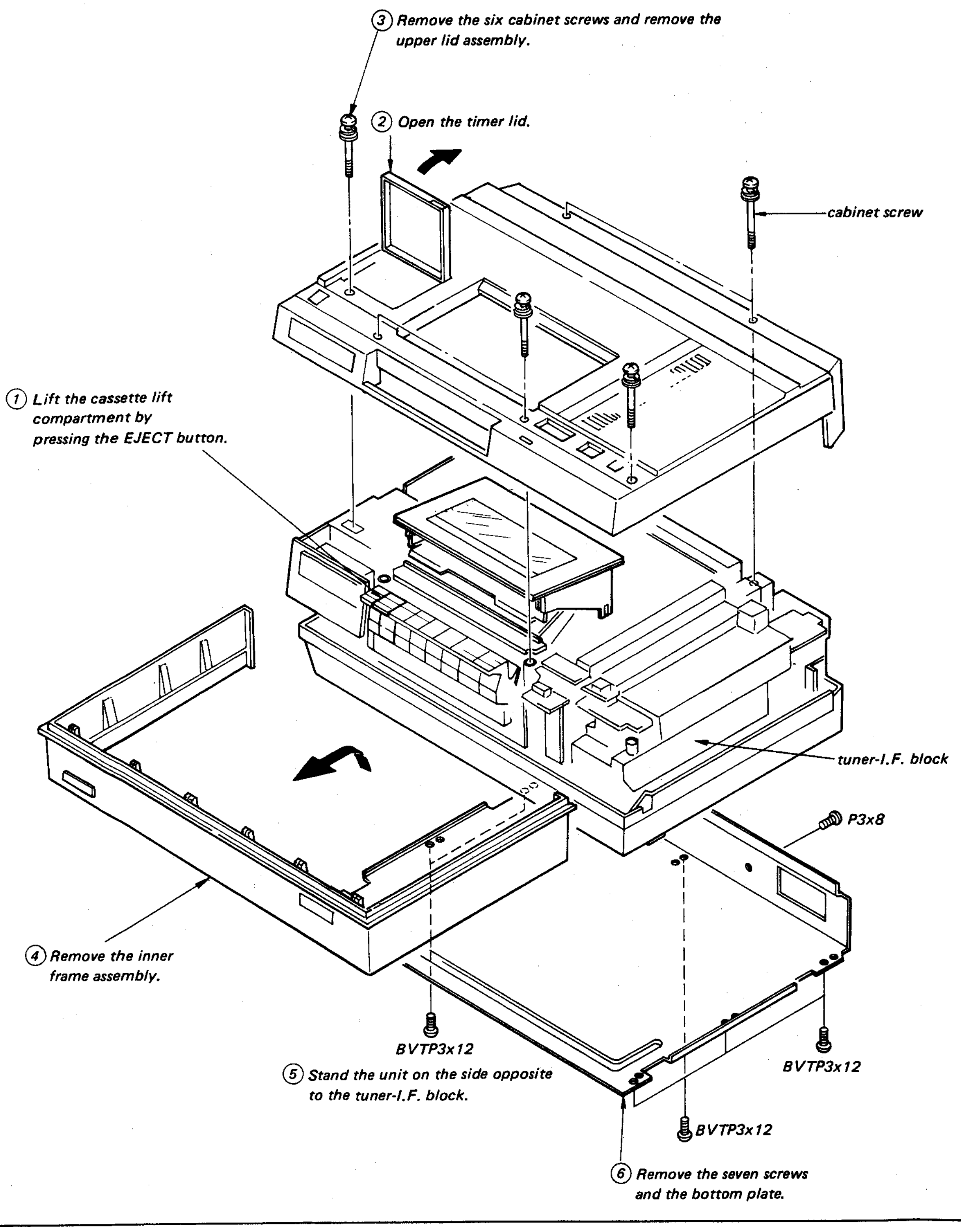
⓫ Install the correct number segment. An asterisk (∗) segment may be used to indicate an inactive channel.



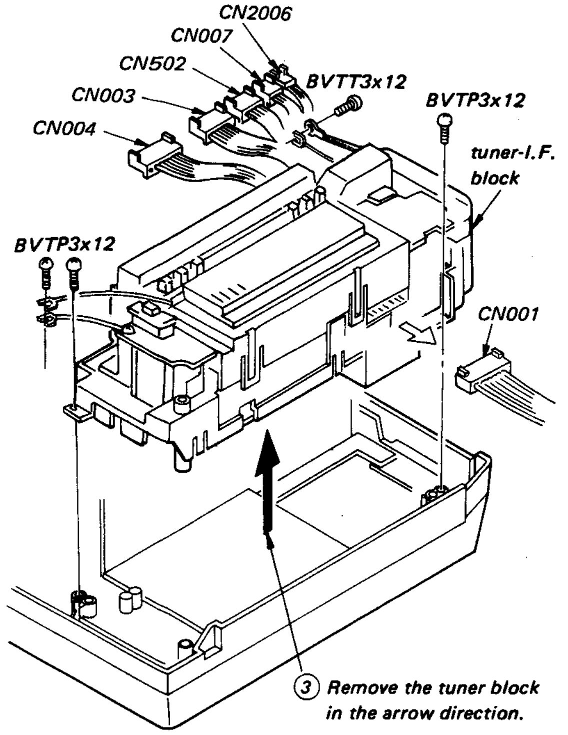
⓬ Replace the sheet.

1-3. DISASSEMBLY

1-3-1. Cabinet Removal


③ Remove the six cabinet screws and remove the upper lid assembly.
② Open the timer lid.
cabinet screw
① Lift the cassette lift compartment by pressing the EJECT button.
tuner-I.F. block
P3x8
④ Remove the inner frame assembly.
BVTP3x12
⑤ Stand the unit on the side opposite to the tuner-I.F. block.
BVTP3x12
BVTP3x12
⑥ Remove the seven screws and the bottom plate.

1-3-2. Tuner-I.F. Block Removal



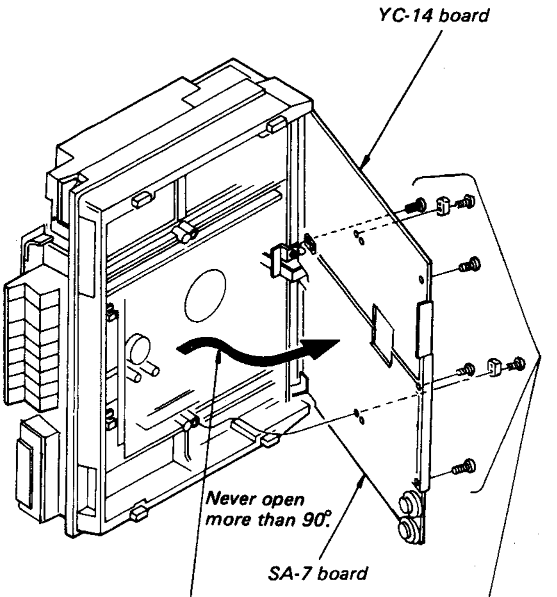
① Remove four screws.

② Pull off the six connectors.

③ Remove the tuner block in the arrow direction.

CN2006
CN007
CN502
CN003
CN004
BVTT3x12
BVTP3x12
tuner-I.F. block
BVTP3x12
CN001

1-3-4. Check of YC-14 and SA-7 Boards

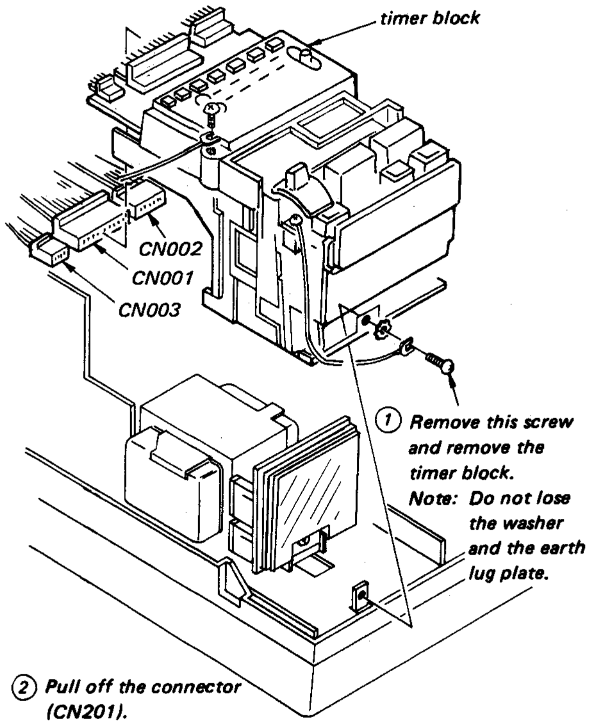


① Remove the six screws. (BVTP3x12)

② Open this in the direction of the arrow.

YC-14 board
Never open more than 90°.
SA-7 board

1-3-3. Timer Block Removal

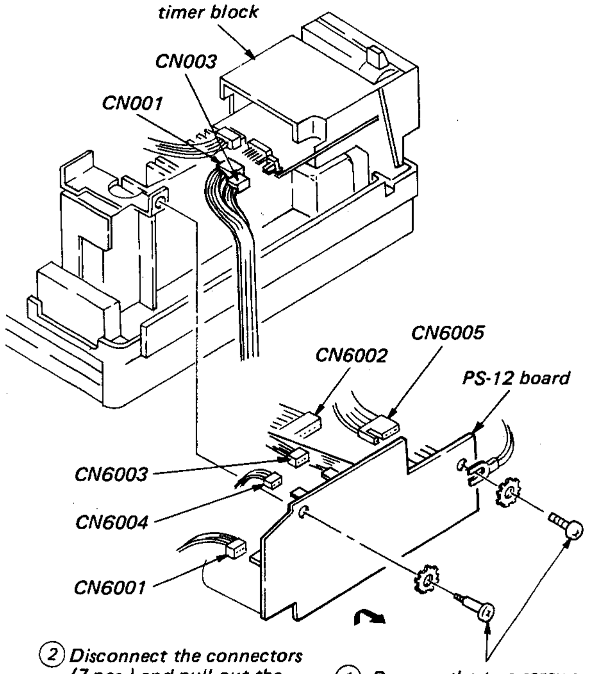


① Remove this screw and remove the timer block.
Note: Do not lose the washer and the earth lug plate.

② Pull off the connector (CN201).

timer block
CN002
CN001
CN003

1-3-5. Check of PS-12 Board



② Disconnect the connectors (7 pcs.) and pull out the PS-12 board

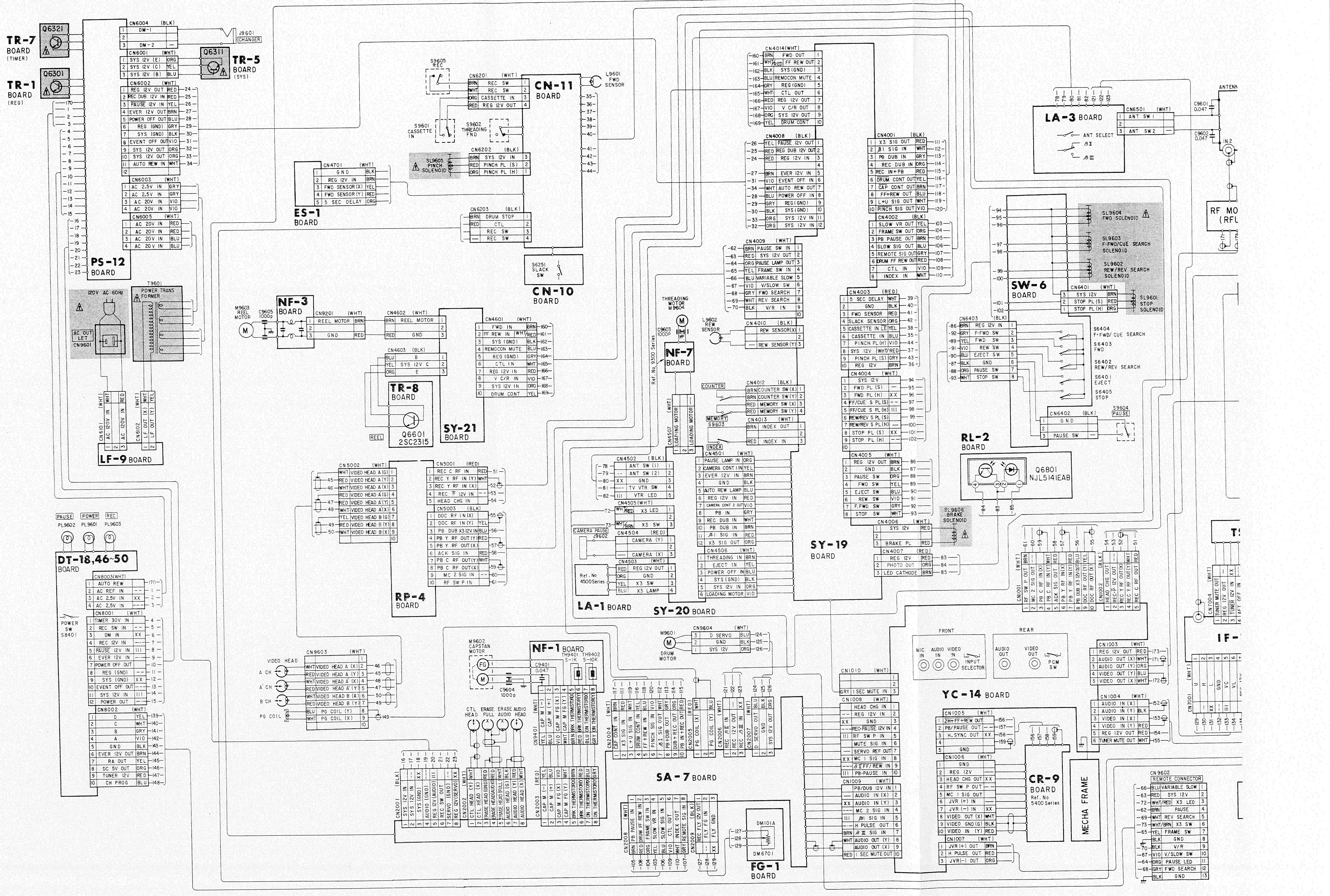
① Remove the two screws.

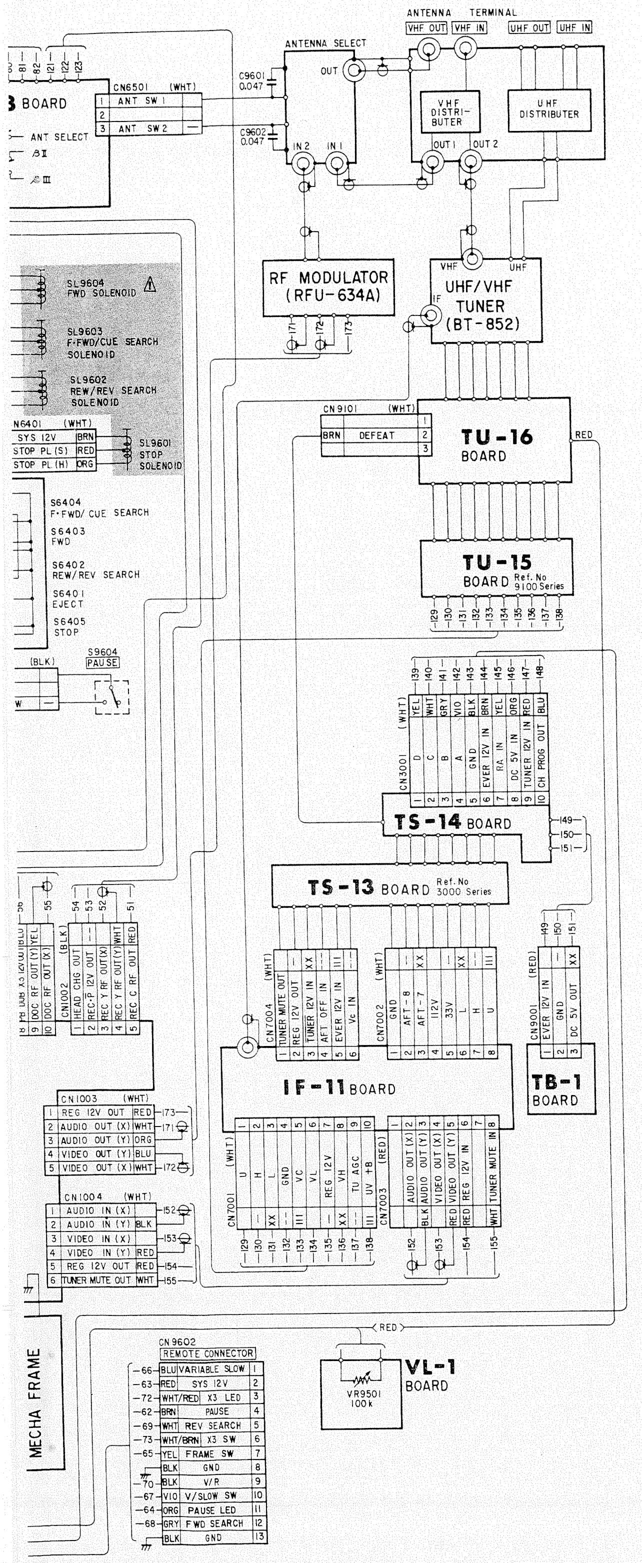
timer block
CN003
CN001
CN6005
CN6002
PS-12 board
CN6003
CN6004
CN6001

SECTION 2
PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

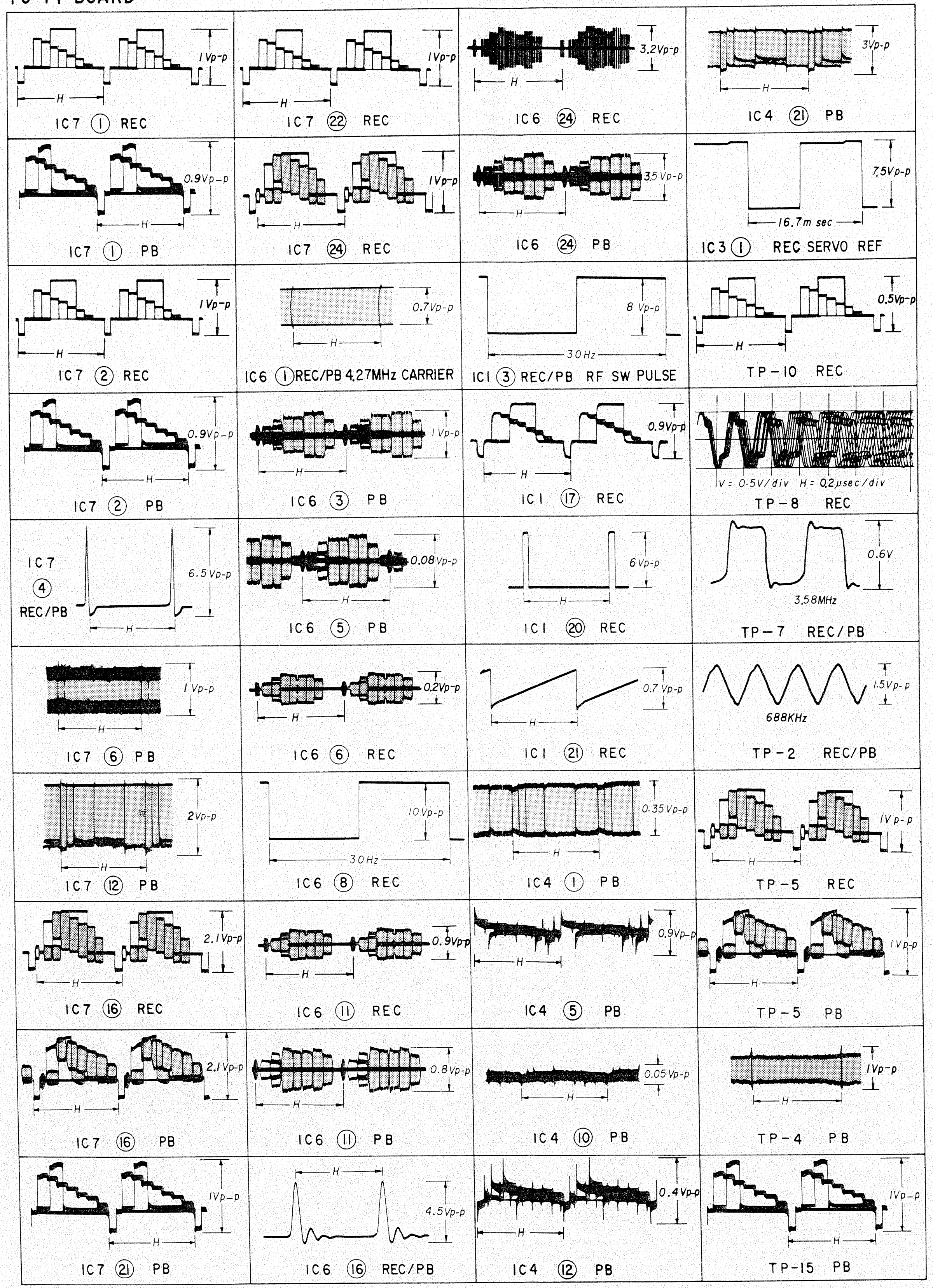
FRAME SCHEMATIC DIAGRAM

– Ref. No. CHASSIS: 9600 series –

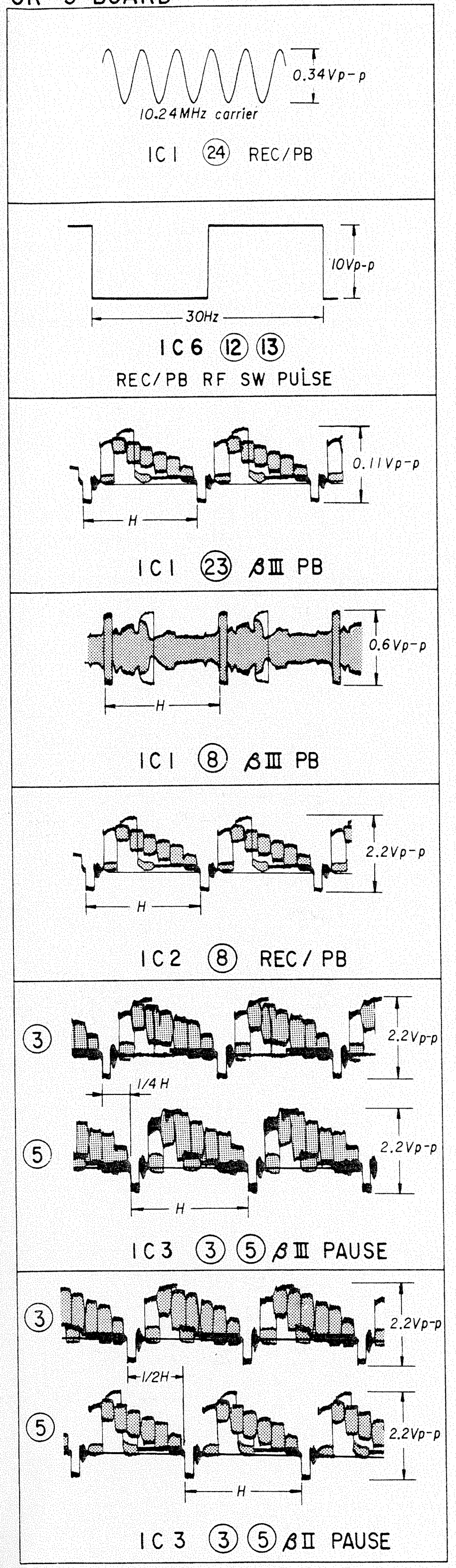

TR-7 BOARD (TIMER)
Q6321
TR-1 BOARD (REG)
Q6301
TR-5 BOARD (SYS)
Q6311
PS-12 BOARD
LF-9 BOARD
DT-18,46-50 BOARD
ES-1 BOARD
NF-3 BOARD
TR-8 BOARD
Q6601 2SC2315
SY-21 BOARD
RP-4 BOARD
CN-11 BOARD
CN-10 BOARD
NF-7 BOARD
LA-1 BOARD
SY-20 BOARD
SY-19 BOARD
NF-1 BOARD
SA-7 BOARD
FG-1 BOARD
YC-14 BOARD
CR-9 BOARD
MECHA FRAME
LA-3 BOARD
SW-6 BOARD
RL-2 BOARD
Q6801 NJL5141EAB
IF-
RF MO (RFU
ANTENN
T9601 POWER TRANS FORMER
120V AC 60Hz
AC OUT LET CN9601
M9603 REEL MOTOR
M9602 CAPSTAN MOTOR
M9601 DRUM MOTOR
THREADING MOTOR M9604
L9601 FWD SENSOR
L9602 REW SENSOR
SL9605 PINCH SOLENOID
SL9604 FWD SOLENOID
SL9603 F-FWD/CUE SEARCH SOLENOID
SL9602 REW/REV SEARCH SOLENOID
SL9601 STOP SOLENOID
SL9606 BRAKE SOLENOID
S9605 REC
S9601 CASSETTE IN
S9602 THREADING END
S6251 SLACK SW
S6404 F-FWD/CUE SEARCH
S6403 FWD
S6402 REW/REV SEARCH
S6401 EJECT
S6405 STOP
S9604 PAUSE
S9603 MEMORY
POWER SW S8401
PAUSE PL9602
POWER PL9601
REC PL9603
VIDEO HEAD A CH A' CH B CH PG COIL
CTL HEAD
ERASE FULL
ERASE AUDIO
AUDIO HEAD
FRONT
REAR
MIC IN
AUDIO IN
VIDEO IN
INPUT SELECTOR
AUDIO OUT
VIDEO OUT
PCM SW
CN9602 REMOTE CONNECTOR
Ref. No 9300 Series
Ref. No 4500 Series
Ref. No 5400 Series
J9601 CHANGER
CAMERA PAUSE J9602


ANTENNA TERMINAL
VHF OUT
VHF IN
UHF OUT
UHF IN
ANTENNA SELECT
OUT
IN 2
IN 1
C9601 0.047
C9602 0.047
CN6501 (WHT)
ANT SW 1
ANT SW 2
BOARD
ANT SELECT
VHF DISTRIBUTER
UHF DISTRIBUTER
OUT 1
OUT 2
RF MODULATOR (RFU-634A)
UHF/VHF TUNER (BT-852)
SL9604 FWD SOLENOID
SL9603 F·FWD/CUE SEARCH SOLENOID
SL9602 REW/REV SEARCH SOLENOID
SL9601 STOP SOLENOID
S6404 F·FWD/CUE SEARCH
S6403 FWD
S6402 REW/REV SEARCH
S6401 EJECT
S6405 STOP
S9604 PAUSE
CN9101 (WHT)
DEFEAT
TU-16 BOARD
TU-15 BOARD Ref. No 9100 Series
CN3001 (WHT)
TS-14 BOARD
TS-13 BOARD Ref. No 3000 Series
IF-11 BOARD
TB-1 BOARD
CN1001
CN1002
CN1003 (WHT)
REG 12V OUT
AUDIO OUT (X)
AUDIO OUT (Y)
VIDEO OUT (Y)
VIDEO OUT (X)
CN1004 (WHT)
AUDIO IN (X)
AUDIO IN (Y)
VIDEO IN (X)
VIDEO IN (Y)
REG 12V OUT
TUNER MUTE OUT
CN9602 REMOTE CONNECTOR
VARIABLE SLOW
SYS 12V
X3 LED
PAUSE
REV SEARCH
X3 SW
FRAME SW
GND
V/R
V/SLOW SW
PAUSE LED
FWD SEARCH
MECHA FRAME
VL-1 BOARD
VR9501 100k
RED

YC-14 BOARD



CR-9 BOARD

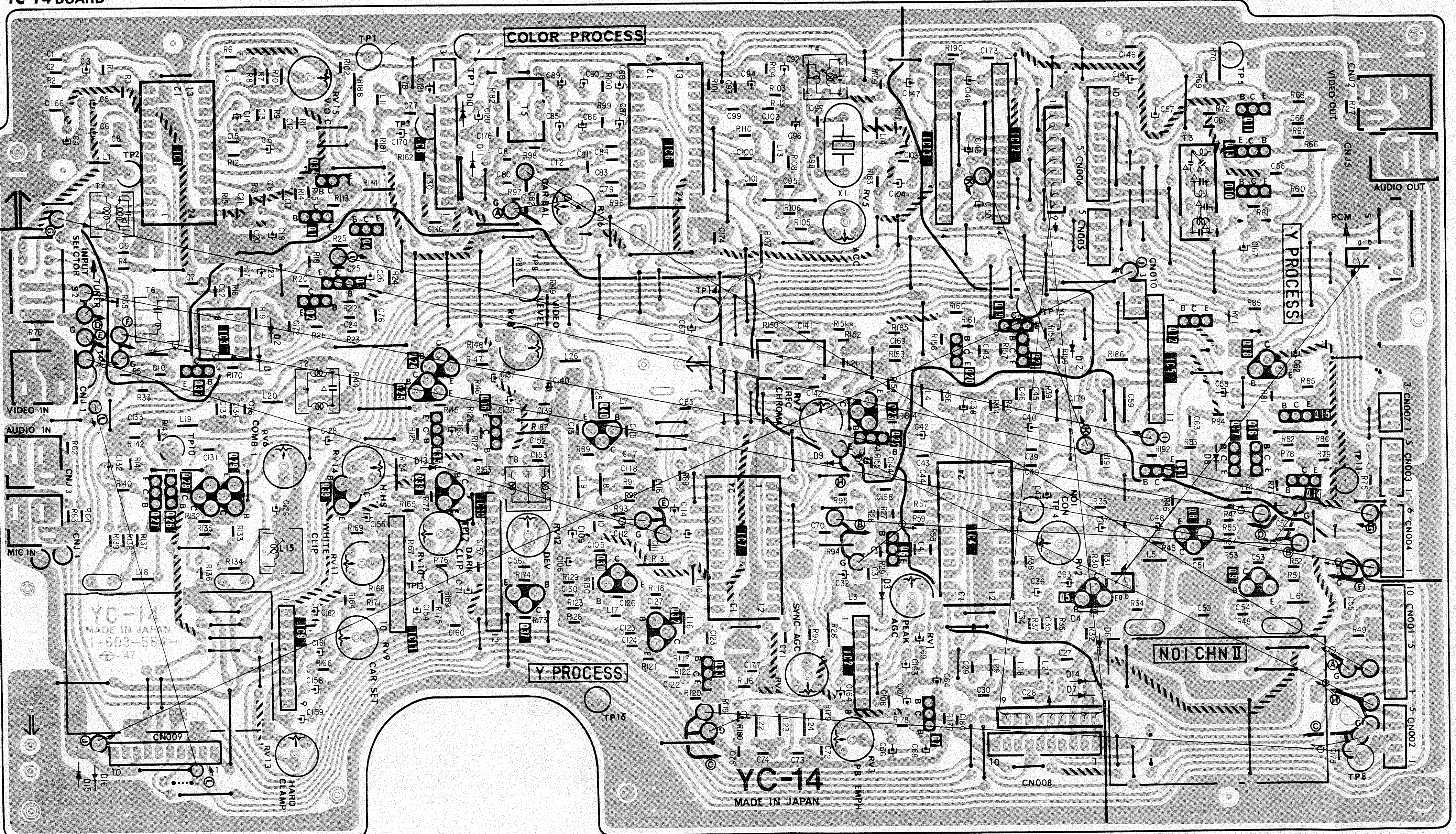


YC-14 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS), RP-4 (RF RECORD/PLAYBACK AMPLIFIER), CR-9 (BETASCAN - CUE/REVIEW-) AND VL-1 PRINTED WIRING BOARDS

– Ref. No. YC-14 BOARD: 1000 series RP-4 BOARD: 5000 series CR-9 BOARD: 5400 series VL-1 BOARD: 9500 series –

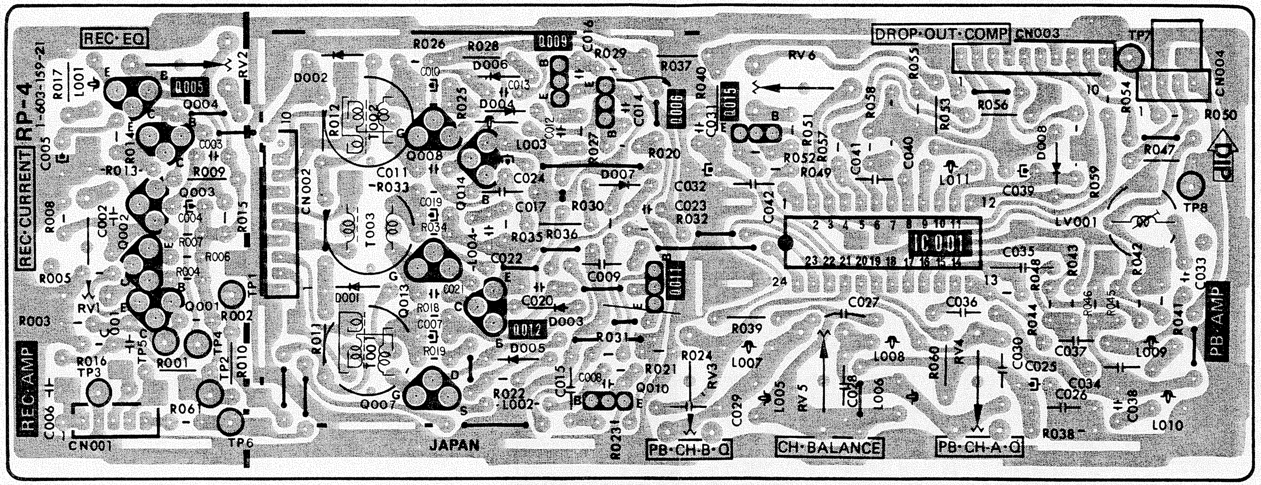
Q, IC	27,26 31 IC1 28 IC3 29 IC9 2 34 1 3 38 4 IC11 25 24 35 39 IC10 36 37 40 30 IC6 32 33 IC7 IC2 23 22 6 7 IC13 20 IC4 IC12 19 21 5 IC5 41 12 8 17 11 13 10 16 9 18 15 14	Q, IC
D	15 16 1 2 10 11 9 3 12 14 7, 4 6 8	D
ADJ	RV6 RV15 RV14 RV11 RV9 RV10 RV8 RV12 RV16 RV4 RV7 RV5 RV3 RV1 RV2	ADJ

YC-14 BOARD


COLOR PROCESS
Y PROCESS
Y PROCESS
NOI CHN II
VIDEO IN
AUDIO IN
MIC IN
INPUT SELECTOR
VIDEO OUT
AUDIO OUT
PCM
YC-14
MADE IN JAPAN
1-603-564-
-47
CN009
CN008
CN001
CN002
CN003
CN004
CN005
CN006
CN007
CN010
TP1
TP2
TP3
TP8
TP14
TP15
TP16
HARD CLAMP
CAR SET
WHITE CLIP
DARK CLIP
COMB
SYNC AGC
PEAK AGC
PB EMPH
REC CHROMA
CAR BAL
VIDEO LEVEL
DEV
RVP

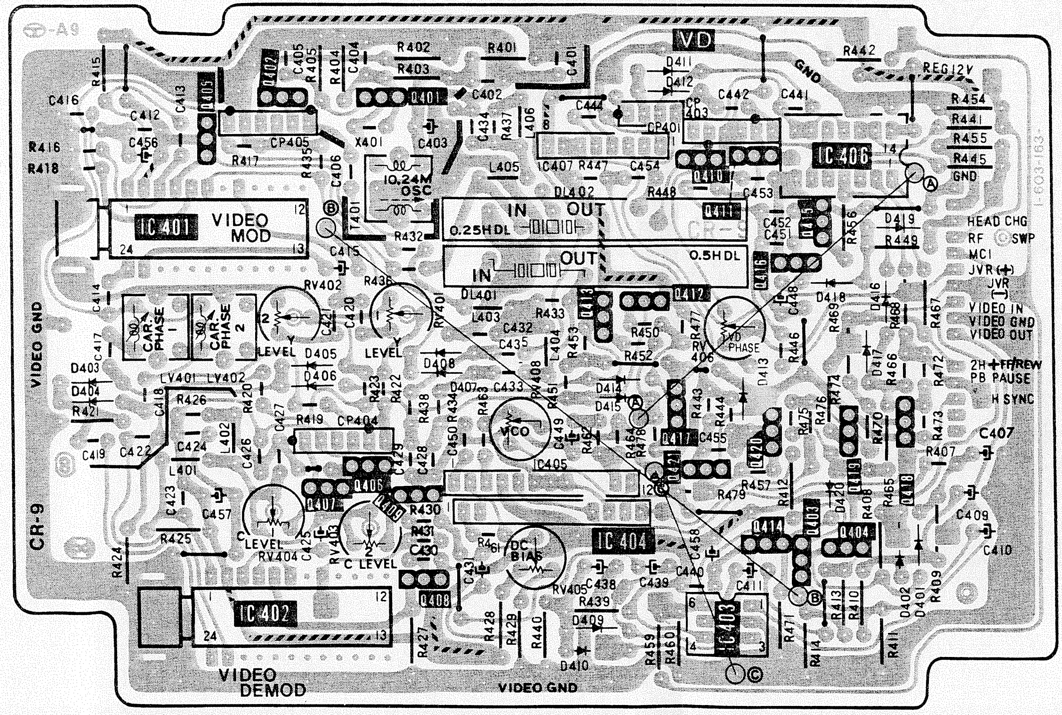
RP-4 BOARD

Q, IC	005 004 003 002 001 008 013 007 014 012 009 006 010 011 015 IC001	Q, IC
D	002 001 006 004 005 003 007 008	D
ADJ	RV1 RV2 RV3 RV6 RV5 RV4 LV001	ADJ

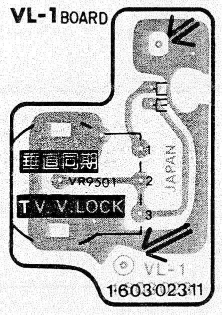

REC·EQ
RP-4
1-603-159-21
REC·CURRENT
REC·AMP
DROP·OUT·COMP
CN003
CN004
TP7
TP8
IC001
PB·AMP
PB·CH·B·Q
CH·BALANCE
PB·CH·A·Q
JAPAN
CN001
CN002
RV1
RV2
RV3
RV4
RV5
RV6
LV001
TP1
TP2
TP3
TP4
TP5
TP6

CR-9 BOARD

Q, IC	IC401 405 402 401 410 411 IC406 413 412,417 420 419 418 IC402 407,406,409,408 IC405,IC404 412 IC403 414,403 404	Q, IC
D	411,412 403,404 405,406 408,407 413 417,416 410,409 420 402,401	D
ADJ	LV401,LV402 RV402,RV404,RV401,RV403 RV408,RV405 RV406	ADJ


A9
VD
GND
REG12V
IC401
VIDEO MOD
IC402
VIDEO DEMOD
IC403
IC404
IC405
IC406
10.24M OSC
0.25HDL
0.5HDL
IN
OUT
DL401
DL402
X401
T401
CAR PHASE 1
CAR PHASE 2
LEVEL
C LEVEL
VCO
DC BIAS
PHASE
VIDEO GND
HEAD CHG
RF
SWP
MC1
JVR(+)
JVR
VIDEO IN
VIDEO GND
VIDEO OUT
2H→FF/REW
PB PAUSE
H SYNC
CR-9

VL-1 BOARD


VR9501
TV V.LOCK
JAPAN
VL-1
1-603-023-11

βII REC MODE

Q	15	16	20
B	0	0.7	7
C	8.1	0	3.8
E	GND	GND	3.8

βII PB MODE

Q	15	16	20
B	0	0.7	7
C	8	0	0
E	GND	GND	0

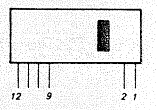
βIII PAUSE MODE

Q	12	13	17	18
B	11.5	11	0	0.6
C	0.7	11.5	11.5	0
E	11.5	11.5	GND	GND

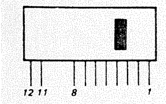
IC6

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
VOLTAGE	8	10.5	0	6	9.5	6	GND	6	6	6	6	5	5	12

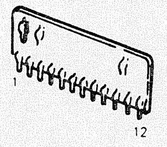
BX360



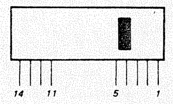
BX361



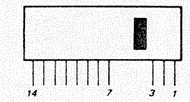
BX364



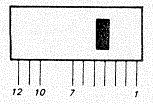
BX383



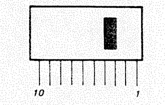
BX384



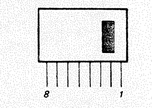
BX3901



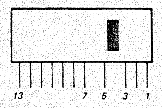
BX3903



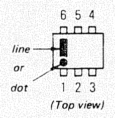
BX3904



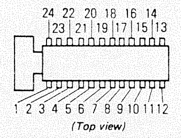
BX3912



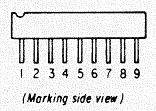
CX130


6 5 4
line or dot
1 2 3
(Top view)

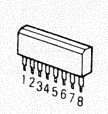
CX134A CX196A
CX135 CX187A
CX136 CX188


24 22 20 18 16 14
23 21 19 17 15 13
1 2 3 4 5 6 7 8 9 10 11 12
(Top view)

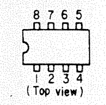
CX825


1 2 3 4 5 6 7 8 9
(Marking side view)

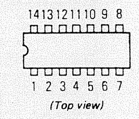
M51848L



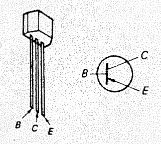
M58478P


8 7 6 5
1 2 3 4
(Top view)

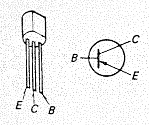
TC4011BP


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

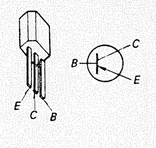
2SA1048



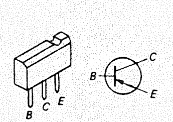
2SA733



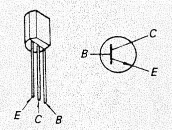
2SA844



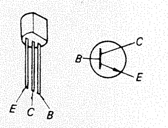
2SA937



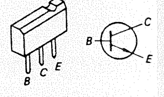
2SC945



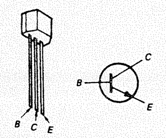
2SC1815



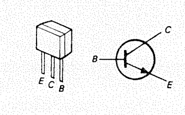
2SC2021



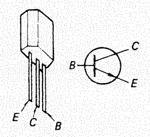
2SC2458



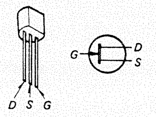
2SC2785



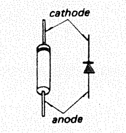
2SC403C



2SK152

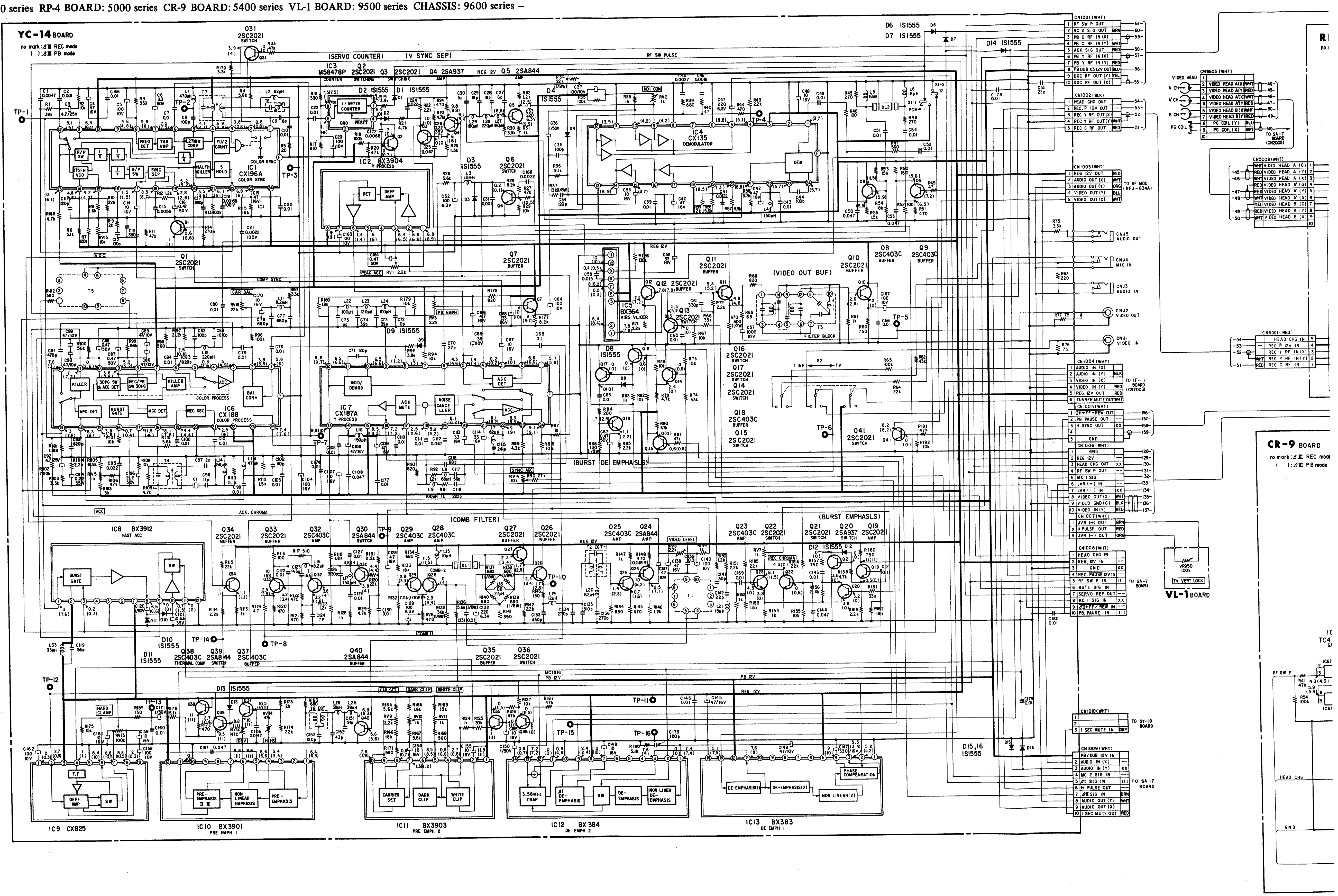


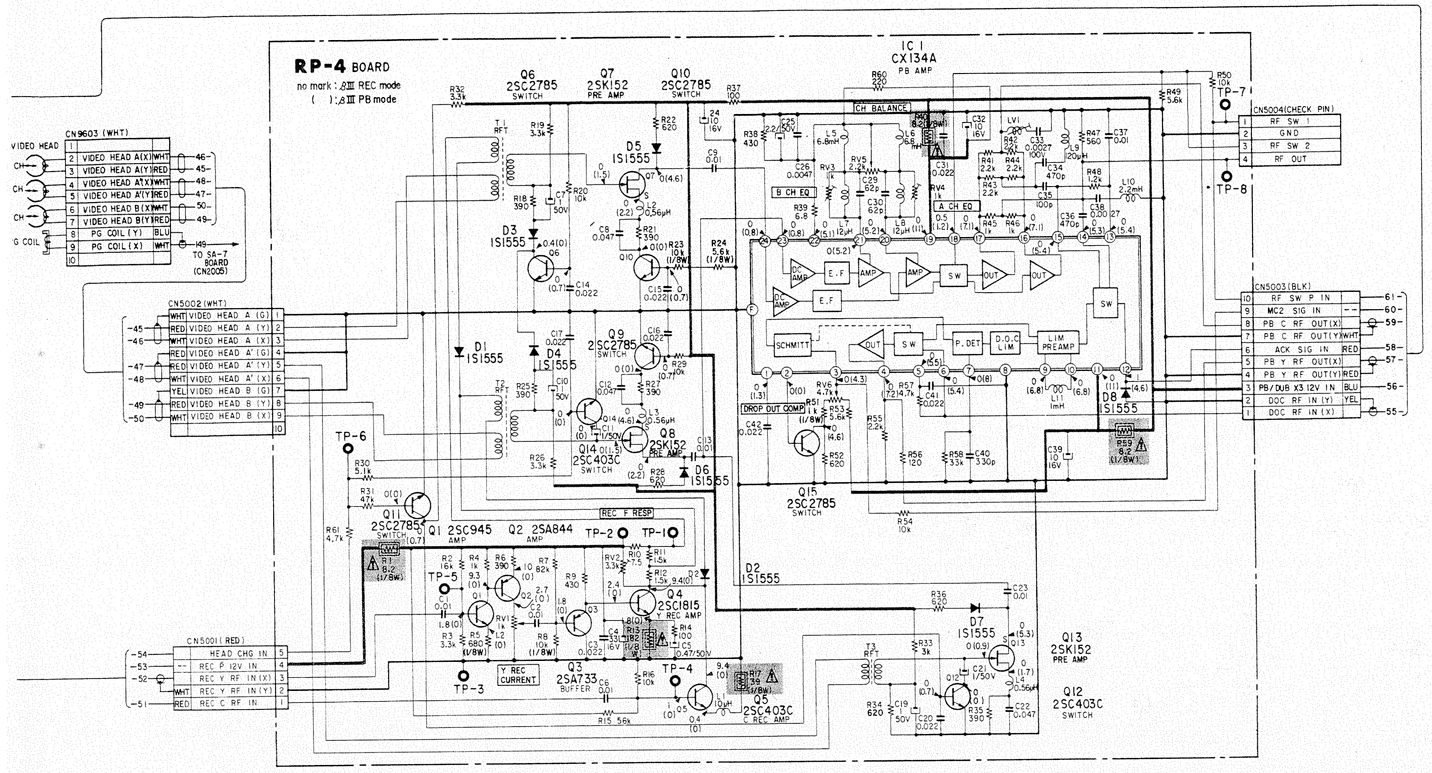
1S1555

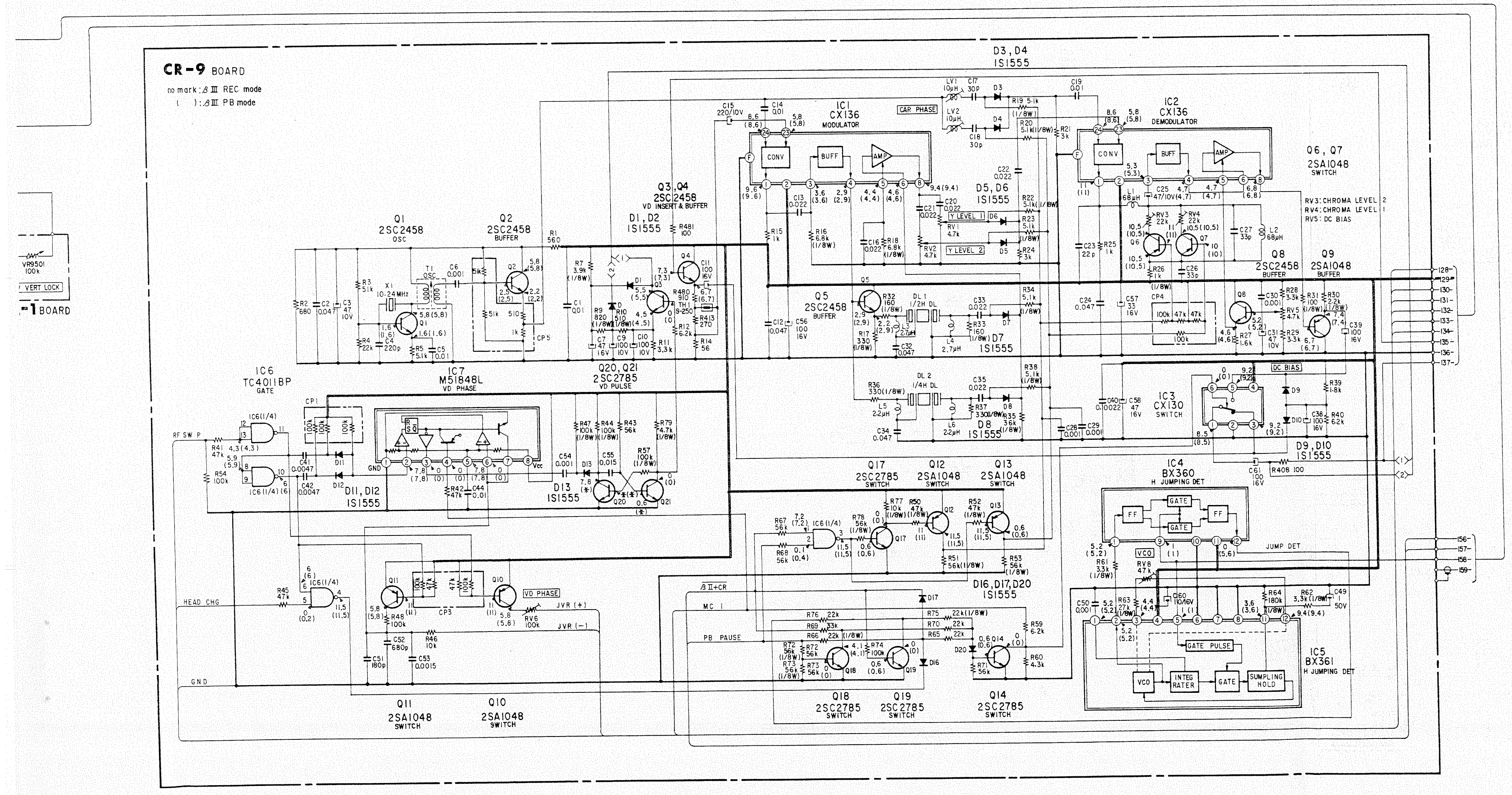

cathode
anode

YC-14 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS), RP-4 (RF RECORD/PLAYBACK AMPLIFIER), CR-9 (BETASCAN –CUE/REVIEW–) AND VL-1 BOARDS SCHEMATIC DIAGRAM

– Ref. No. YC-14 BOARD: 1000 series RP-4 BOARD: 5000 series CR-9 BOARD: 5400 series VL-1 BOARD: 9500 series CHASSIS: 9600 series –


YC-14 BOARD
no mark : ▲Ⅲ REC mode
( ) : ▲Ⅲ PB mode
IC1 CX196A COLOR SYNC
IC2 BX3904 Y PROCESS
IC3 M58478P
IC4 CX135 DEMODULATOR
IC5 BX364 VIRS VL/CLER
IC6 CX188 COLOR PROCESS
IC7 CX187A Y PROCESS
IC8 BX3912 FAST ACC
IC9 CX825
IC10 BX3901 PRE EMPH 1
IC11 BX3903 PRE EMPH 2
IC12 BX384 DE EMPH 2
IC13 BX383 DE EMPH 1
(SERVO COUNTER)
(V SYNC SEP)
(VIDEO OUT BUF)
FILTER BLOCK
(COMB FILTER)
(BURST EMPHASLS)
(BURST DE EMPHASLS)
TP-1
TP-2
TP-3
TP-4
TP-5
TP-6
TP-7
TP-8
TP-9
TP-10
TP-11
TP-12
TP-13
TP-14
TP-15
TP-16
CN1001 (WHT)
CN1002 (BLK)
CN1003 (WHT)
CN1004 (WHT)
CN1005 (WHT)
CN1006 (WHT)
CN1007 (WHT)
CN1008 (WHT)
CN1009 (WHT)
CN1010 (WHT)
CN9603 (WHT)
CN5002 (WHT)
CN5001 (RED)
TO RF MOD (RFU-634A)
TO IF-11 BOARD (CN7003)
TO SA-7 BOARD
TO SY-19 BOARD
CNJ5 AUDIO OUT
CNJ4 MIC IN
CNJ3 AUDIO IN
CNJ2 VIDEO OUT
CNJ1 VIDEO IN
VIDEO HEAD
PG COIL
CR-9 BOARD
no mark : ▲Ⅲ REC mode
( ) : ▲Ⅲ PB mode
VL-1 BOARD
TV VERT LOCK
VR9501 100k


RP-4 BOARD
no mark : REC mode
( ) : PB mode
IC1 CX134A PB AMP
Q6 2SC2785 SWITCH
Q7 2SK152 PRE AMP
Q10 2SC2785 SWITCH
CN5004 (CHECK PIN)
CN5003 (BLK)
CN5002 (WHT)
CN5001 (RED)
CN9603 (WHT)
VIDEO HEAD
G COIL
TO SA-7 BOARD (CN2005)
Q15 2SC2785 SWITCH
Q11 2SC2785 SWITCH
Q1 2SC945 AMP
Q2 2SA844 AMP
Q3 2SA733 BUFFER
Q4 2SC1815 Y REC AMP
Q5 2SC403C C REC AMP
Q13 2SK152 PRE AMP
Q12 2SC403C SWITCH
Q14 2SC403C SWITCH
Q8 2SK152 PRE AMP
Q9 2SC2785 SWITCH
D1 1S1555
D2 1S1555
D3 1S1555
D4 1S1555
D5 1S1555
D6 1S1555
D7 1S1555
D8 1S1555
TP-1
TP-2
TP-3
TP-4
TP-5
TP-6
TP-7
TP-8
DROP OUT COMP
REC F RESP
Y REC CURRENT
CH BALANCE


CR-9 BOARD
no mark : REC mode
( ) : PB mode
IC1 CX136 MODULATOR
IC2 CX136 DEMODULATOR
IC3 CX130 SWITCH
IC4 BX360 H JUMPING DET
IC5 BX361 H JUMPING DET
IC6 TC4011BP GATE
IC7 M51848L VD PHASE
Q1 2SC2458 OSC
Q2 2SC2458 BUFFER
Q3, Q4 2SC2458 VD INSERT & BUFFER
Q5 2SC2458 BUFFER
Q6, Q7 2SA1048 SWITCH
Q8 2SC2458 BUFFER
Q9 2SA1048 BUFFER
Q10 2SA1048 SWITCH
Q11 2SA1048 SWITCH
Q12 2SA1048 SWITCH
Q13 2SA1048 SWITCH
Q14 2SC2785 SWITCH
Q17 2SC2785 SWITCH
Q18 2SC2785 SWITCH
Q19 2SC2785 SWITCH
Q20, Q21 2SC2785 VD PULSE
D1, D2 1S1555
D3, D4 1S1555
D5, D6 1S1555
D7 1S1555
D8 1S1555
D9, D10 1S1555
D11, D12 1S1555
D13 1S1555
D16, D17, D20 1S1555
RV3: CHROMA LEVEL 2
RV4: CHROMA LEVEL 1
RV5: DC BIAS
CAR PHASE
Y LEVEL 1
Y LEVEL 2
DC BIAS
VD PHASE
JUMP DET
HEAD CHG
GND
RF SW P
MC 1
PB PAUSE
VR5501
VERT LOCK

The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTES:

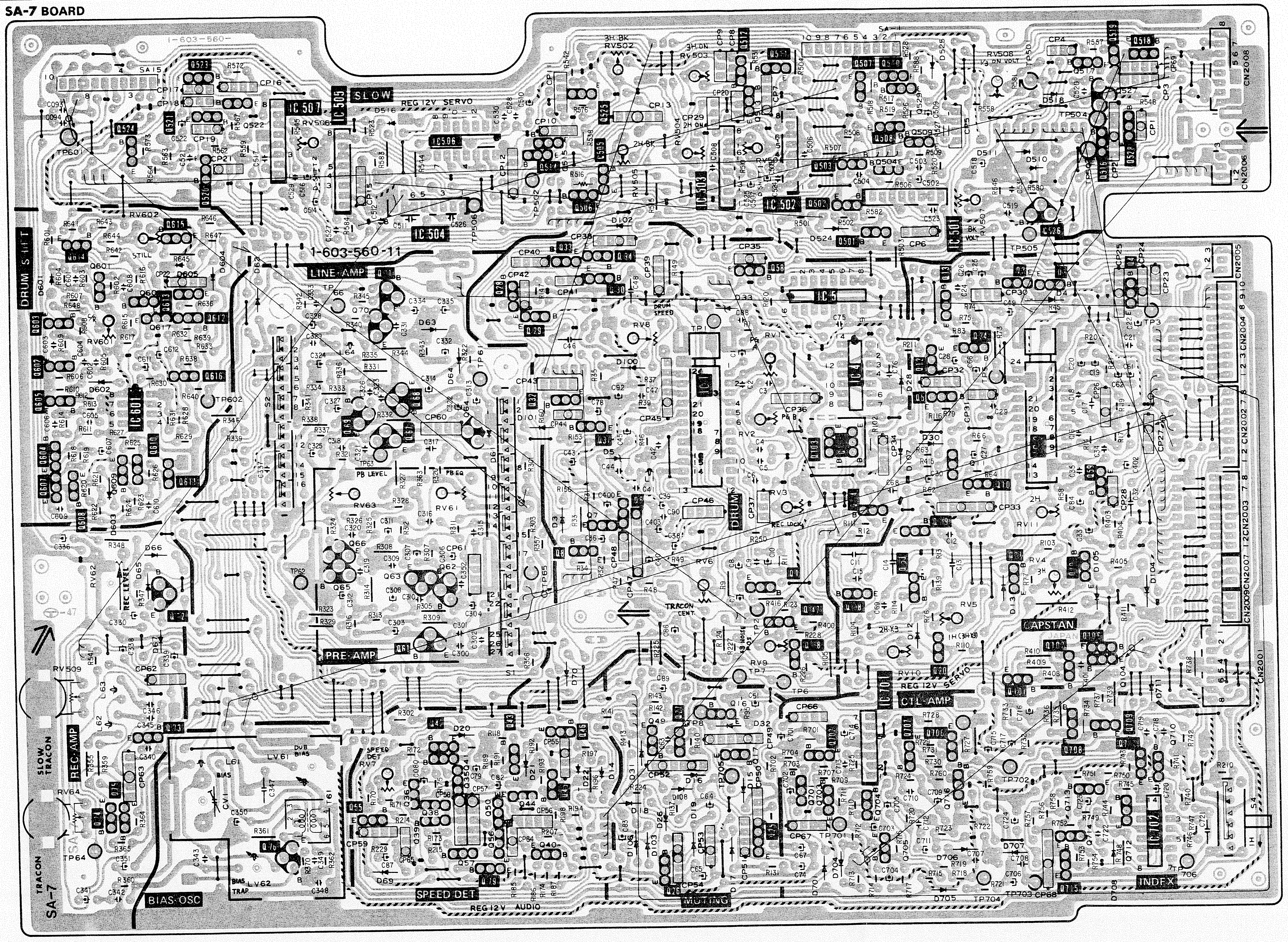
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000Ω; MΩ = 1000kΩ
- All capacitors are in μF unless otherwise noted. p : μμF 50WV or less are not indicated except for electrolytics.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ▨ : nonflammable resistor.
- The red lines show the main voltages.

SA-7 (SERVO, AUDIO RECORD/PLAYBACK PROCESS), LA-3 (SWITCH), FG-1 (CAPSTAN FLY FG) AND NF-1 PRINTED WIRING BOARDS

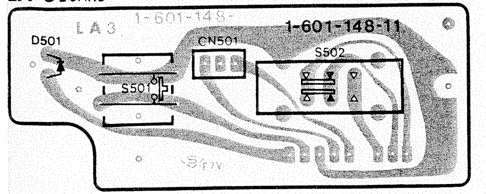
– Ref. No. SA-7 BOARD: 2000 series LA-3 BOARD: 6500 series FG-1 BOARD: 6700 series NF-1 BOARD: 9400 series –

Q, IC	614 603 602 605 604 607,608 601 74,75 609,610 IC601 609 524 606,617 6010 72 73 615 611 523 613,612,521,522 611,616,520 76 IC507 IC505 66,65 55 70,71 69,67,68 36 IC504 63,62 61 38,39 42,41,35 IC506 57,79 64 43 50,56,44,40 28 29 46,45 32 514,515 33 8 525 506 34 30 31 7 505 6 49 26 27 16 IC1 17 1 IC503 25 512,513,511 58 47 48 701 IC502 702 703 IC5 103 18,54 503,507,508,510,529,509 502,501,504, IC501 105, IC4 IC701 704,705 19,53 707 13 12,5,11,24 20,706 716 10 21 101 2 IC2 526 3 102,708 714,715 100 517 59 713 519 527 516 106 104 709,711,710 712 518 528 4 IC702	Q, IC
D	601 602 603 65,66 67 605 604 62 516 69 63 64 20 61 21 101 70 3 22 14 102 5 18,106,31,103,26 100 108 16 19 32 17 15 33 524 701,704 502 107 28 12 30 310 525 705,706 13 707 511 510 4 518 105 708 104 711	D
ADJ	RV509 RV64 RV601 RV62 RV602 CV1 LV62 LV61 RV506 RV63 RV61 R502 RV505 RV8 RV6 RV503,RV504,RV501,RV1,RV2 RV9 RV3 RV10 RV5 RV507 RV508 RV11 RV4	ADJ

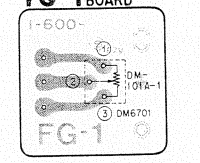
SA-7 BOARD


1-603-560-11
SLOW
REG 12V SERVO
DRUM SHIFT
LINE AMP
DRUM
TRACON CENT.
CAPSTAN
REG 12V SERVO
CTL AMP
PRE AMP
REC AMP
SLOW TRACON
BIAS OSC
SPEED DET
REG 12V AUDIO
MUTING
INDEX
SA-7

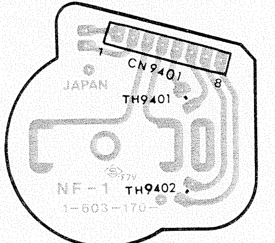
LA-3 BOARD


D501
LA-3
CN501
1-601-148-11
S502
S501

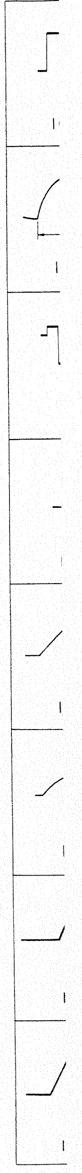
FG-1 BOARD

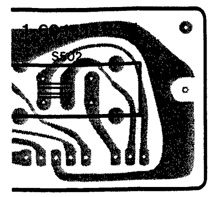

1-600-
DM-101A-1
DM6701
FG-1

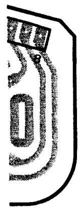
NF-1 BOARD


CN9401
JAPAN
TH9401
NF-1
TH9402
1-603-170-

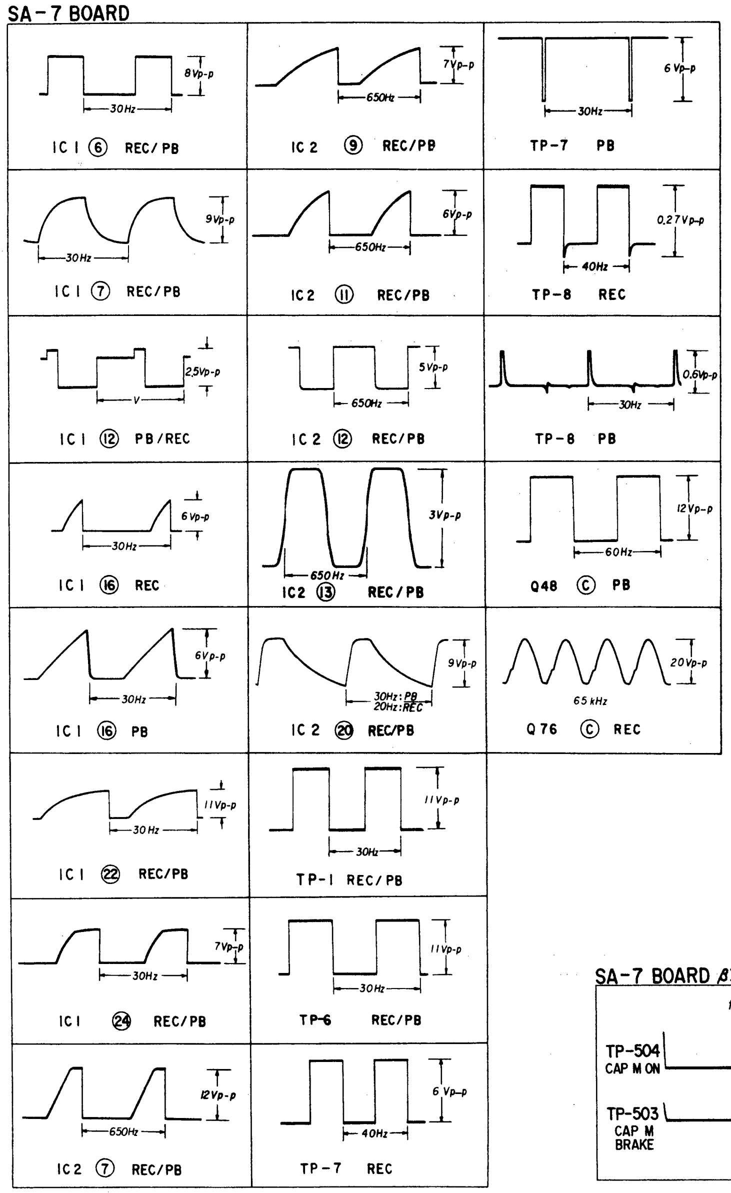
SA-7



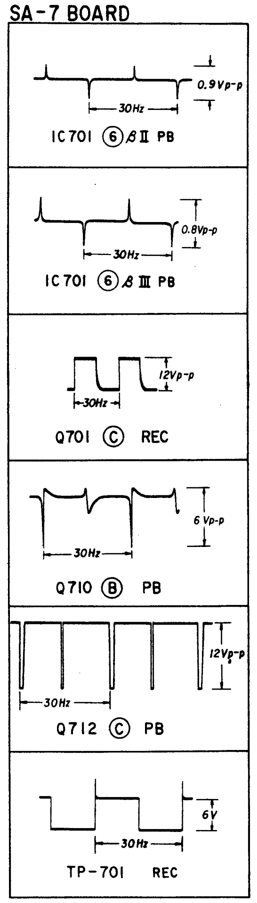




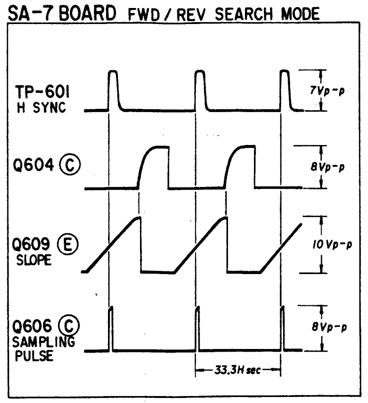
SA-7 BOARD


8Vp-p
30Hz
IC1 ⑥ REC/PB
7Vp-p
650Hz
IC2 ⑨ REC/PB
6Vp-p
30Hz
TP-7 PB
9Vp-p
30Hz
IC1 ⑦ REC/PB
6Vp-p
650Hz
IC2 ⑪ REC/PB
0.27Vp-p
40Hz
TP-8 REC
2.5Vp-p
V
IC1 ⑫ PB/REC
5Vp-p
650Hz
IC2 ⑫ REC/PB
0.6Vp-p
30Hz
TP-8 PB
6Vp-p
30Hz
IC1 ⑯ REC
3Vp-p
650Hz
IC2 ⑬ REC/PB
12Vp-p
60Hz
Q48 Ⓒ PB
6Vp-p
30Hz
IC1 ⑯ PB
9Vp-p
30Hz:PB
20Hz:REC
IC2 ⑳ REC/PB
20Vp-p
65kHz
Q76 Ⓒ REC
11Vp-p
30Hz
IC1 ㉒ REC/PB
11Vp-p
30Hz
TP-1 REC/PB
7Vp-p
30Hz
IC1 ㉔ REC/PB
11Vp-p
30Hz
TP-6 REC/PB
12Vp-p
650Hz
IC2 ⑦ REC/PB
6Vp-p
40Hz
TP-7 REC

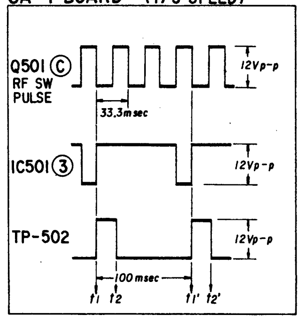
SA-7 BOARD


0.9Vp-p
30Hz
IC701 ⑥ βII PB
0.8Vp-p
30Hz
IC701 ⑥ βIII PB
12Vp-p
30Hz
Q701 Ⓒ REC
6Vp-p
30Hz
Q710 Ⓑ PB
12Vp-p
30Hz
Q712 Ⓒ PB
6V
30Hz
TP-701 REC

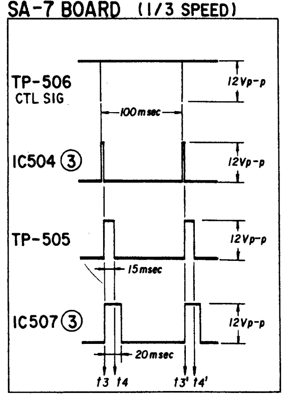
SA-7 BOARD FWD / REV SEARCH MODE


TP-601
H SYNC
7Vp-p
Q604 Ⓒ
8Vp-p
Q609 Ⓔ
SLOPE
10Vp-p
Q606 Ⓒ
SAMPLING PULSE
8Vp-p
33.3H sec

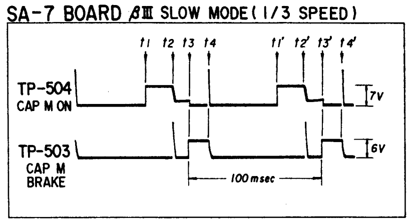
SA-7 BOARD βIII SLOW MODE (1/3 SPEED)


Q501 Ⓒ
RF SW PULSE
12Vp-p
33.3msec
IC501 ③
12Vp-p
TP-502
12Vp-p
100msec
t1
t2
t1'
t2'

SA-7 BOARD βIII SLOW MODE (1/3 SPEED)


TP-506
CTL SIG
12Vp-p
100msec
IC504 ③
12Vp-p
TP-505
12Vp-p
15msec
IC507 ③
12Vp-p
20msec
t3
t4
t3'
t4'

SA-7 BOARD βIII SLOW MODE (1/3 SPEED)


t1
t2
t3
t4
t1'
t2'
t3'
t4'
TP-504
CAP M ON
7V
TP-503
CAP M BRAKE
6V
100msec

βIII X3 MODE

IC2

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLTAGE	4.9	2.3	4.2	3	0.1	5.3	0.3	5.8	3.4	2.7	2.9	2.7	4.5	GND	GND	GND	5.8	11.5	11.5	6.5	0.8	2.3	5.3	12

Q		21	28	29	31	32	33	53	54	56	57	67
VOLTAGE	B	0	0.6	11	11	0.6	0.6	0	0	0	0	0.6
	C	5.7	0	12	12	0	0	1.7	0	3.6	0	GND
	E	GND	GND	10.5	12	GND	GND	GND	GND	GND	GND	0

FF / REW MODE

IC1

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLTAGE	3.8	3.5	3.7	5.2	3.1	3	5.8	*	*	*	3.2	0.9	6	12	2.8	2.6	6.6	5.8	5	4	1.7	5.2	3.8	2.4

CUE / REV MODE

Q		34
VOLTAGE	B	0.6
	C	0
	E	GND

βII REC / PB MODE

IC1

PIN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLTAGE	REC	3.9	3.5	3.7	5.2	3.1	3	5.8	*	*	5.5	3.2	0.9	6	12	2.8	1.1	2.5	5.8	5.1	*	1.7	5.3	3.8	2.3
	PB	*	3.5	3.7	5.2	3.1	3	5.8	*	*	5.5	*	0.9	6	12	2.8	2.5	6.6	5.8	*	*	1.7	*	3.8	*

IC2

PIN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLTAGE	REC	2.9	2	4.2	3.3	0.2	4.2	4.3	5.8	2.4	2.5	1.7	2.5	4.4	GND	GND	GND	2.9	5.1	11.5	6.4	*	2.3	7.5	12
	PB	2.9	*	*	*	0.2	4.2	*	5.8	2.4	2.5	1.7	2.5	4.4	GND	GND	GND	6	11.5	11.5	6.4	*	*	*	12

IC4

PIN		1	2	3	4	5	6	7	8	9	10	11	12	13	14
VOLTAGE	REC	0	0	12	2.2	12	9.4	GND	12	2.5	9.4	12	0	4	12
	PB	0	0	12	6	12	5.2	GND	12	6.6	5.2	12	0	4	12

Q		5			20			24			44			45			46			61			75			78		
		B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
VOLTAGE	REC	11	12	12	0.7	0	GND	0	2.8	GND	0.7	0	GND	0	8.4	GND	0.7	0	GND	0	GND	0	0	GND	0	0.7	0	GND
	PB	11	12	12	0.7	0	GND	0	2.8	GND	0	0	GND	0	8.4	GND	0.7	0	GND	0	GND	0	0	GND	0.3	0.7	0	GND

βI PB MODE

IC2

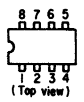
PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLTAGE	5	2.4	5.4	3	0.1	5.4	0.2	5.8	*	2.7	2.9	2.7	4.5	GND	GND	GND	6	11.5	11.5	6.4	*	*	*	12

Q		18	19	20	21	30	33	34	40	46	53	54	61	65	74	75
VOLTAGE	B	0	0	0.6	0	0.6	0.6	0	0	0.7	0	0	0	0	0	0
	C	0	2.1	0	5.7	0	0	9	7.4	0	1.7	0	GND	GND	GND	GND
	E	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	0	0	0	0

FF/REW MODE

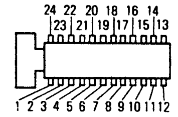
Q		612	613	616	715	716
VOLTAGE	B	11	0.6	6.4	0	0.6
	C	12	0.2	5.8	0	0
	E	12	GND	5.8	GND	GND

µPC4558C



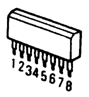
(Top view)

CX143A
CX186

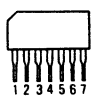

24 22 20 18 16 14
23 21 19 17 15 13
1 2 3 4 5 6 7 8 9 10 11 12

(Top view)

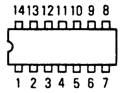
M51848L



TA7120P

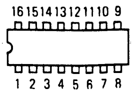


TC4011BP
TC4013BP


14 13 12 11 10 9 8
1 2 3 4 5 6 7

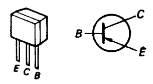
(Top view)

TC4027

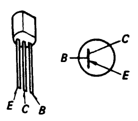

16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8

(Top view)

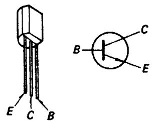
2SA1175



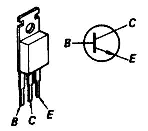
2SB733



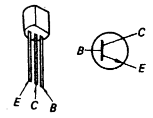
2SC945



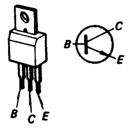
2SC1061



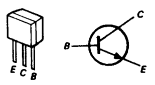
2SC1362
2SC1364



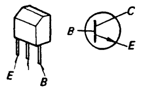
2SC1761



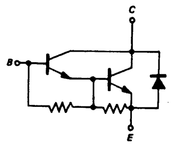
2SC2785



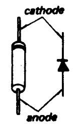
2SD774



2SD985

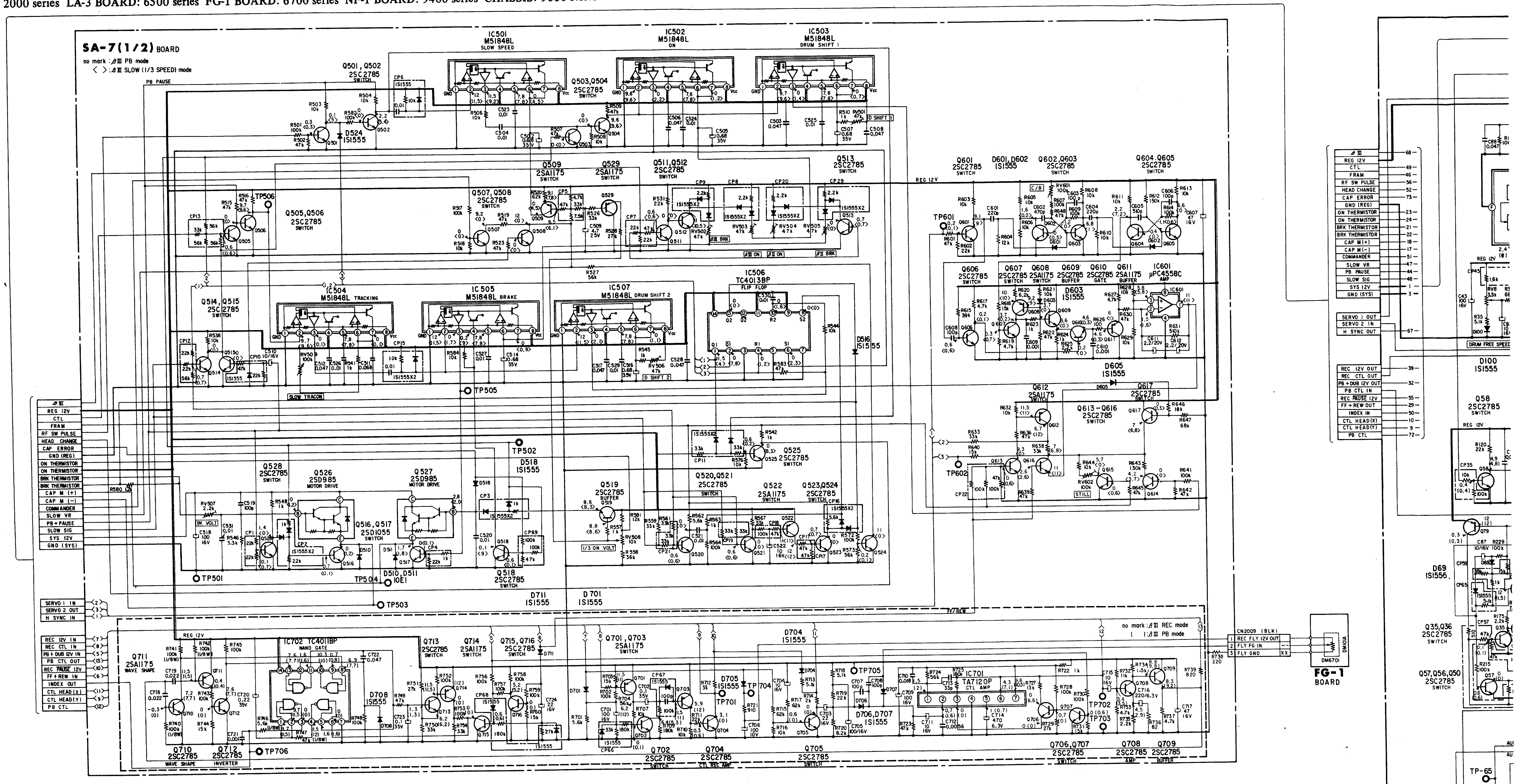


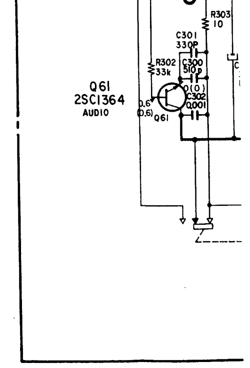
1S1555 RD6.2E
1S1587 RD13E-B
10E1


cathode
anode

SA-7 (SERVO, AUDIO RECORD/PLAYBACK PROCESS), LA-3 (SWITCH), FG-1 (CAPSTAN FLY FG) AND NF-1 BOARDS SCHEMATIC DIAGRAM

– Ref. No. SA-7 BOARD: 2000 series LA-3 BOARD: 6500 series FG-1 BOARD: 6700 series NF-1 BOARD: 9400 series CHASSIS: 9600 series –

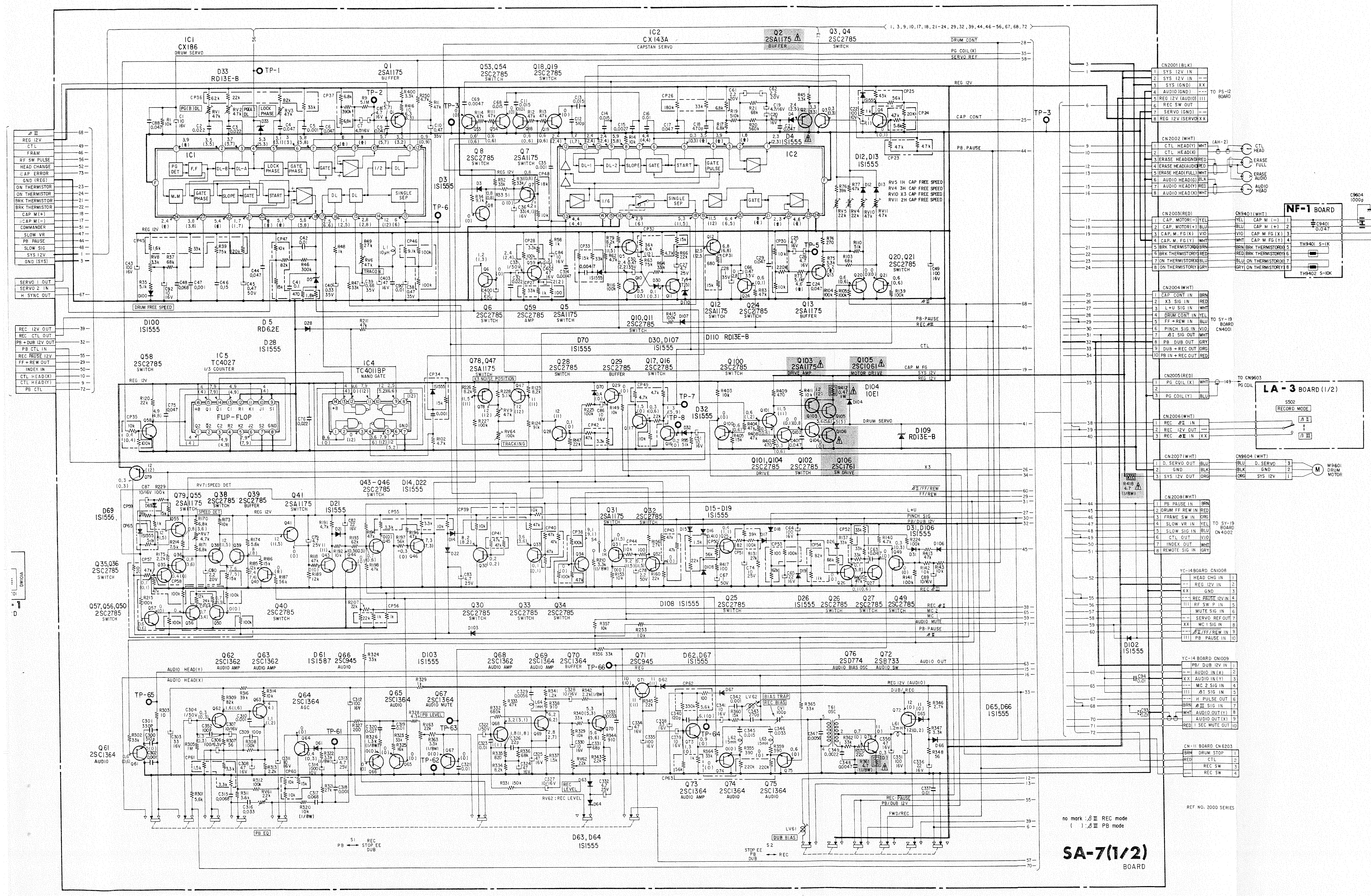

SA-7(1/2) BOARD
no mark : βII PB mode
〈 〉 : βII SLOW (1/3 SPEED) mode
IC501 M51848L SLOW SPEED
IC502 M51848L ON
IC503 M51848L DRUM SHIFT 1
Q501, Q502 2SC2785 SWITCH
Q503, Q504 2SC2785 SWITCH
D524 1S1555
Q505, Q506 2SC2785 SWITCH
Q507, Q508 2SC2785 SWITCH
Q509 2SA1175 SWITCH
Q529 2SA1175 SWITCH
Q511, Q512 2SC2785 SWITCH
Q513 2SC2785 SWITCH
TP506
Q514, Q515 2SC2785 SWITCH
IC504 M51848L TRACKING
IC505 M51848L BRAKE
IC507 M51848L DRUM SHIFT 2
IC506 TC4013BP FLIP FLOP
D516 1S1555
SLOW TRACON
TP505
TP502
D518 1S1555
Q528 2SC2785 SWITCH
Q526 2SD985 MOTOR DRIVE
Q527 2SD985 MOTOR DRIVE
Q516, Q517 2SD1055 SWITCH
Q518 2SC2785 SWITCH
D510, D511 10E1
TP501
TP504
TP503
Q519 2SC2785 BUFFER
Q520, Q521 2SC2785 SWITCH
Q522 2SA1175 SWITCH
Q523, Q524 2SC2785 SWITCH
Q525 2SC2785 SWITCH
1/3 ON VOLT
D711 1S1555
D701 1S1555
REG 12V
Q601 2SC2785 SWITCH
D601, D602 1S1555
Q602, Q603 2SC2785 SWITCH
Q604, Q605 2SC2785 SWITCH
TP601
Q606 2SC2785 SWITCH
Q607 2SC2785 SWITCH
Q608 2SA1175 SWITCH
Q609 2SC2785 BUFFER
Q610 2SC2785 GATE
Q611 2SA1175 BUFFER
IC601 μPC4558C AMP
D603 1S1555
D605 1S1555
Q612 2SA1175 SWITCH
Q613–Q616 2SC2785 SWITCH
Q617 2SC2785 SWITCH
TP602
STILL
βII REG 12V CTL FRAM RF SW PULSE HEAD CHANGE CAP ERROR GND (REG) ON THERMISTOR ON THERMISTOR BRK THERMISTOR BRK THERMISTOR CAP M (+) CAP M (−) COMMANDER SLOW VR PB+PAUSE SLOW SIG SYS 12V GND (SYS)
SERVO 1 IN SERVO 2 OUT H SYNC IN
REC 12V IN REC CTL IN PB+DUB 12V IN PB CTL OUT REC PAUSE 12V FF+REW IN INDEX OUT CTL HEAD (X) CTL HEAD (Y) PB CTL
Q711 2SA1175 WAVE SHAPE
IC702 TC4011BP NAND GATE
Q713 2SC2785 SWITCH
Q714 2SA1175 SWITCH
Q715, Q716 2SC2785 SWITCH
D708 1S1555
Q710 2SC2785 WAVE SHAPE
Q712 2SC2785 INVERTER
TP706
Q701, Q703 2SA1175 SWITCH
D704 1S1555
D705 1S1555
TP704
TP705
TP701
IC701 TA7120P CTL AMP
D706, D707 1S1555
TP702
TP703
Q702 2SC2785 SWITCH
Q704 2SC2785 CTL REC AMP
Q705 2SC2785 SWITCH
Q706, Q707 2SC2785 SWITCH
Q708 2SC2785 AMP
Q709 2SC2785 BUFFER
no mark : βII REC mode
( ) : βII PB mode
CN2009 (BLK)
REC FLY 12V OUT
FLY FG IN
FLY GND
DM6701
FG-1 BOARD
REC 12V OUT REC CTL OUT PB+DUB 12V OUT PB CTL IN REC PAUSE 12V FF+REW OUT INDEX IN CTL HEAD (X) CTL HEAD (Y) PB CTL
SERVO 1 OUT SERVO 2 IN H SYNC OUT
D100 1S1555
Q58 2SC2785 SWITCH
D69 1S1555
Q35, Q36 2SC2785 SWITCH
Q57, Q56, Q50 2SC2785 SWITCH
DRUM FREE SPEED


TP-65
Q61 2SC1364 AUDIO

The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTES:

- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000Ω; MΩ = 1000kΩ
- All capacitors are in μF unless otherwise noted. p : μμF 50WV or less are not indicated except for electrolytics.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊣▨⊢ : nonflammable resistor.
- The red lines show the main voltages.

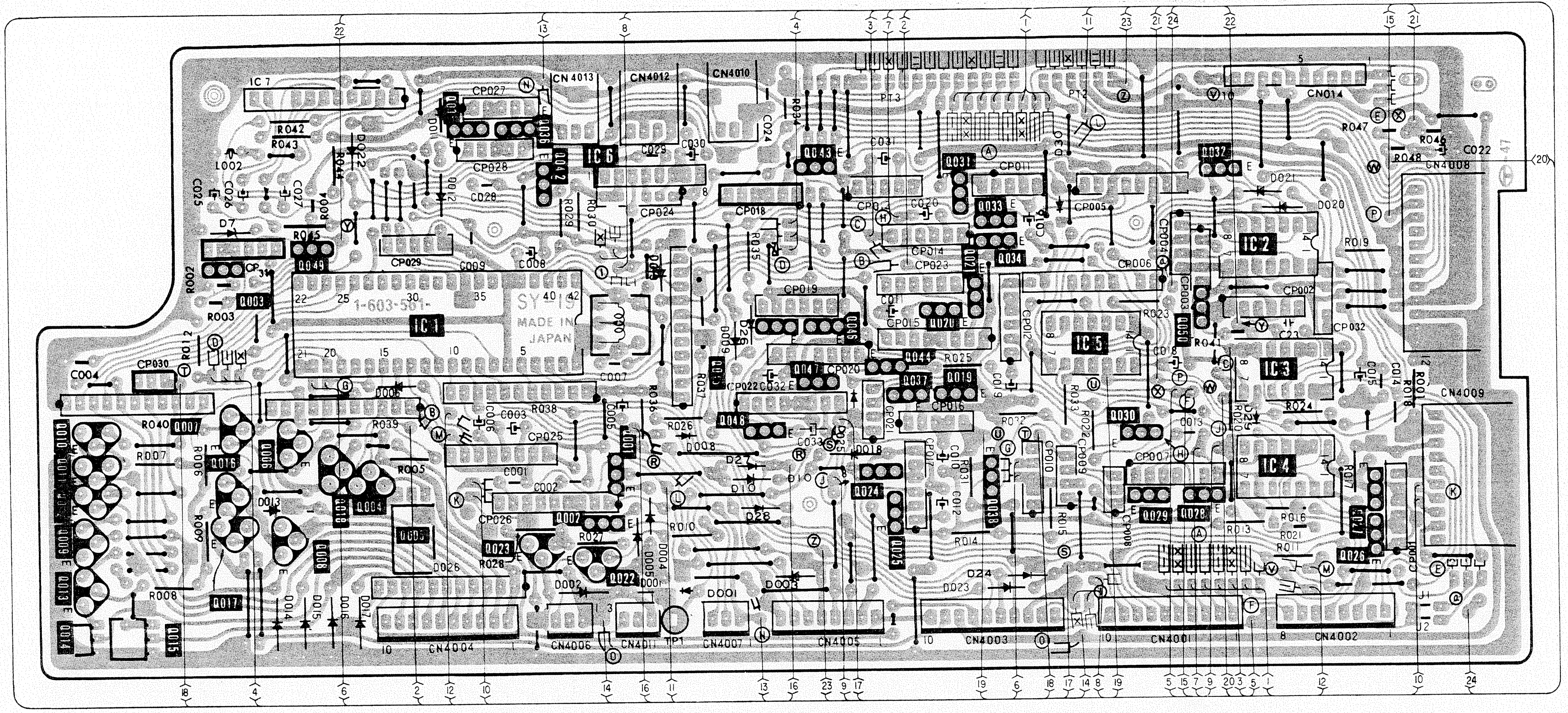

IC1 CX186 DRUM SERVO
IC2 CX143A CAPSTAN SERVO
Q1 2SA1175 BUFFER
Q2 2SA1175 BUFFER
Q3, Q4 2SC2785 SWITCH
Q53, Q54 2SC2785 SWITCH
Q18, Q19 2SC2785 SWITCH
D33 RD13E-B
TP-1
TP-2
TP-3
TP-5
TP-6
TP-7
TP-8
Q8 2SC2785 SWITCH
Q7 2SA1175 SWITCH
D3 1S1555
D4 1S1555
D12, D13 1S1555
RV5 1H CAP FREE SPEED
RV4 3H CAP FREE SPEED
RV10 X3 CAP FREE SPEED
RV11 2H CAP FREE SPEED
Q6 2SC2785 SWITCH
Q59 2SC2785 AMP
Q5 2SA1175 SWITCH
Q10, Q11 2SC2785 SWITCH
Q12 2SA1175 SWITCH
Q14 2SC2785 SWITCH
Q13 2SA1175 BUFFER
Q20, Q21 2SC2785 SWITCH
D100 1S1555
D5 RD6.2E
D28 1S1555
D70 1S1555
D30, D107 1S1555
D110 RD13E-B
DRUM FREE SPEED
Q58 2SC2785 SWITCH
IC5 TC4027 1/2 COUNTER
IC4 TC4011BP NAND GATE
FLIP-FLOP
Q78, Q47 2SA1175 SWITCH
Q28 2SC2785 SWITCH
Q29 2SC2785 BUFFER
Q17, Q16 2SC2785 SWITCH
Q100 2SC2785 SWITCH
Q103 2SA1175 DRIVE AMP
Q105 2SC1061 MOTOR DRIVE
D104 10E1
D109 RD13E-B
D32 1S1555
TRACKING
X3 NOISE POSITION
DRUM SERVO
Q101, Q104 2SC2785 DRIVE
Q102 2SC2785 SWITCH
Q106 2SC1761 SW DRIVE
D69 1S1555
Q79, Q55 2SA1175 SWITCH
Q38 2SC2785 SWITCH
Q39 2SC2785 BUFFER
Q41 2SA1175 SWITCH
D21 1S1555
Q43-Q46 2SC2785 SWITCH
D14, D22 1S1555
Q31 2SA1175 SWITCH
Q32 2SC2785 SWITCH
D15-D19 1S1555
D31, D106 1S1555
RV7: SPEED DET
SPEED DET
Q35, Q36 2SC2785 SWITCH
Q57, Q56, Q50 2SC2785 SWITCH
Q40 2SC2785 SWITCH
Q30 2SC2785 SWITCH
Q33 2SC2785 SWITCH
Q34 2SC2785 SWITCH
D108 1S1555
Q25 2SC2785 SWITCH
D26 1S1555
Q26 2SC2785 SWITCH
Q27 2SC2785 SWITCH
Q49 2SC2785 SWITCH
Q62 2SC1362 AUDIO AMP
Q63 2SC1362 AUDIO AMP
D61 1S1587
Q66 2SC945 AUDIO
D103 1S1555
Q68 2SC1362 AUDIO AMP
Q69 2SC1364 AUDIO AMP
Q70 2SC1364 BUFFER
TP-66
Q71 2SC945 REG
D62, D67 1S1555
Q76 2SD774 AUDIO BIAS OSC
Q72 2SB733 AUDIO SW
AUDIO OUT
AUDIO HEAD(Y)
AUDIO HEAD(X)
TP-65
Q61 2SC1364 AUDIO
Q64 2SC1364 AGC
Q65 2SC1364 AUDIO
Q67 2SC1364 AUDIO MUTE
PB LEVEL
TP-61
TP-62
TP-63
TP-64
REC LEVEL
RV62: REC LEVEL
BIAS TRAP
REC BIAS
DUB BIAS
D63, D64 1S1555
D65, D66 1S1555
Q73 2SC1364 AUDIO AMP
Q74 2SC1364 AUDIO
Q75 2SC1364 AUDIO
PB EQ
S1 PB REC STOP EE DUB
S2 STOP EE PB DUB REC
LV61
D102 1S1555
CN2001 (BLK) TO PS-12 BOARD
CN2002 (WHT)
CTL HEAD
ERASE FULL
ERASE AUDIO
AUDIO HEAD
CN2003 (RED)
NF-1 BOARD
M9602 CAPSTAN MOTOR
C9604 1000p
TH9401 S-1K
TH9402 S-10K
CN2004 (WHT) TO SY-19 BOARD CN4001
CN2005 (RED) TO CN9603 PG COIL
LA-3 BOARD (1/2)
S502 RECORD MODE
CN2006 (WHT)
CN2007 (WHT)
CN9604 (WHT)
M9601 DRUM MOTOR
CN2008 (WHT) TO SY-19 BOARD CN4002
YC-14 BOARD CN1008
YC-14 BOARD CN1009
CN-11 BOARD CN6203
no mark : ⊿Ⅲ REC mode
( ) : ⊿Ⅲ PB mode
REF NO. 2000 SERIES
SA-7(1/2) BOARD

SY-19, SY-20, SY-21 (SYSTEM CONTROL), CN-10, CN-11 (SLACK SENSOR, RELAY), ES-1 (FWD SENSOR), SW-6 (SWITCH, RELAY), RC-11 (REMOTE CONTROL), LA-1 (LAMP), TR-8, NF-7, RL-2 AND NF-3 PRINTED WIRING BOARDS

– Ref. No. SY-19 BOARD: 4000 series SY-20 LA-1 BOARD: 4500 series SY-21 BOARD: 4600 series CN-10 BOARD: 6251 series CN-11 BOARD: 6200 series ES-1 BOARD: 4700 series SW-6 BOARD: 6400 series TR-8 BOARD: 6600 series NF-7 BOARD: 9300 series RL-2 BOARD: 6800 series NF-3 BOARD: 9200 s

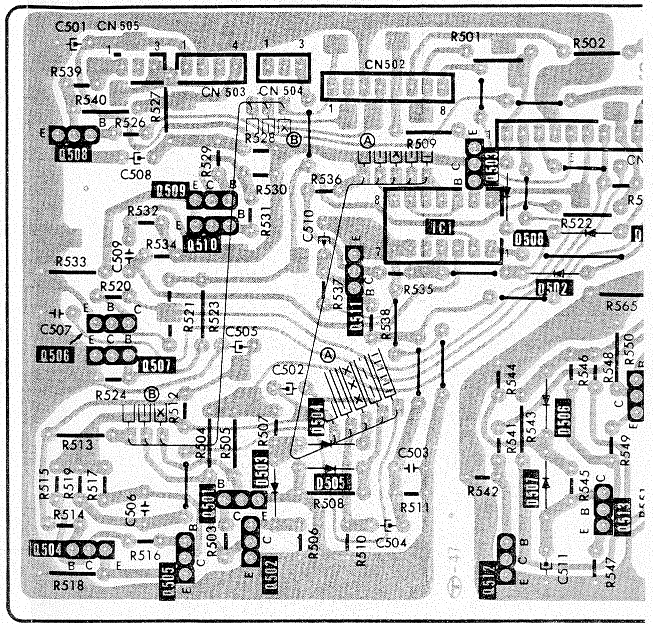
SY-19 BOARD

Q, IC	10,11 3 IC7 35 36 42 IC6 43 44 31 33 34 32 IC2 12,9 7 16 49 IC1 1 48 45 47 46 37 20 21 IC5 30 50 IC3 27 13,14 15 17 6 8 18 4 5 23 2 22 24 25 19 38 29 28 IC4 26	Q, IC
D	7 13 22 11 19 8 9 26,27 25 30 21 20 14 15 16 17 6 12 2 5 4 1 10,28,3 18 23 24 29	D

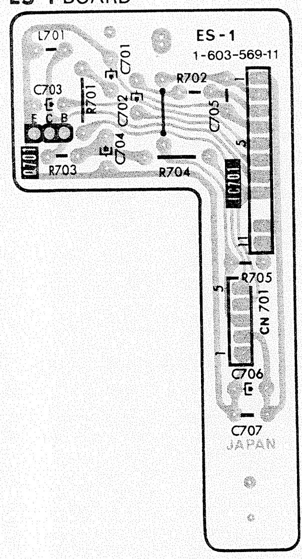

IC 7
IC1
IC2
IC3
IC4
IC5
IC6
SY-19
1-603-581-
MADE IN JAPAN
CN 4013
CN4012
CN4010
CN014
CN4008
CN4009
CN4004
CN4006
CN4011
CN4007
CN4005
CN4003
CN4001
CN4002
TP1
22
13
8
4
3
7
2
1
11
23
21
24
15
6
14
16
17
12
10
9
19
18
5
20

Q, IC	508 509 503 506,507 510 511 IC1 504 505 501,502 513
D	508 502 501 503 504,505 506,507

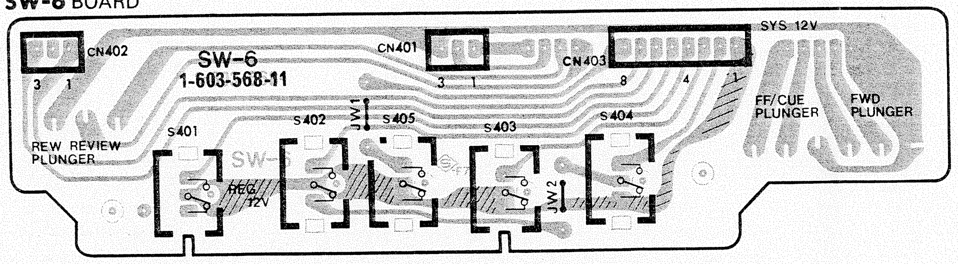
SY-20 BOARD


C501
CN 505
CN 503
CN 504
CN502
R501
R502
R539
R540
Q508
Q509
Q510
Q506
Q507
Q504
Q505
Q511
Q512
Q513
IC1
R513
R518
R542

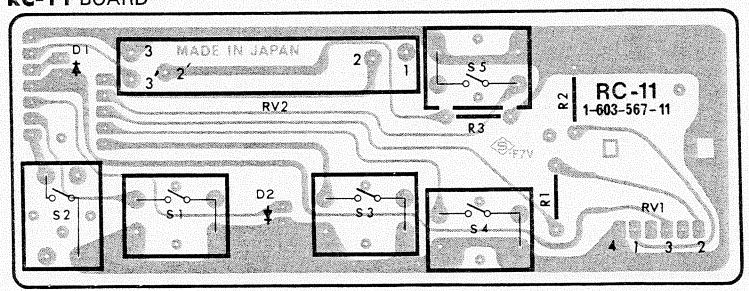
ES-1 BOARD

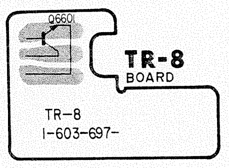

ES-1
1-603-569-11
L701
C701
R702
R701
C703
C702
C704
C705
Q701
R703
R704
R705
CN 701
C706
C707
JAPAN

SW-6 BOARD

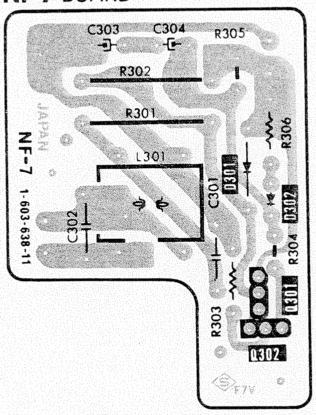

CN402
SW-6
1-603-568-11
CN401
CN403
SYS 12V
FF/CUE PLUNGER
FWD PLUNGER
REW REVIEW PLUNGER
S401
S402
S405
S403
S404
REG 12V

RC-11 BOARD

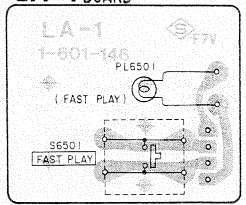

D1
MADE IN JAPAN
S5
RC-11
1-603-567-11
RV2
R2
R3
D2
R1
RV1
S2
S1
S3
S4


TR-8 BOARD
Q6601
TR-8
1-603-697-

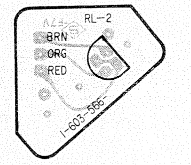
NF-7 BOARD


C303
C304
R305
R302
R301
NF-7
1-603-638-11
JAPAN
R306
L301
C301
D301
D302
C302
R304
R303
Q301
Q302

LA-1 BOARD


LA-1
1-601-146
PL6501
(FAST PLAY)
S6501
FAST PLAY

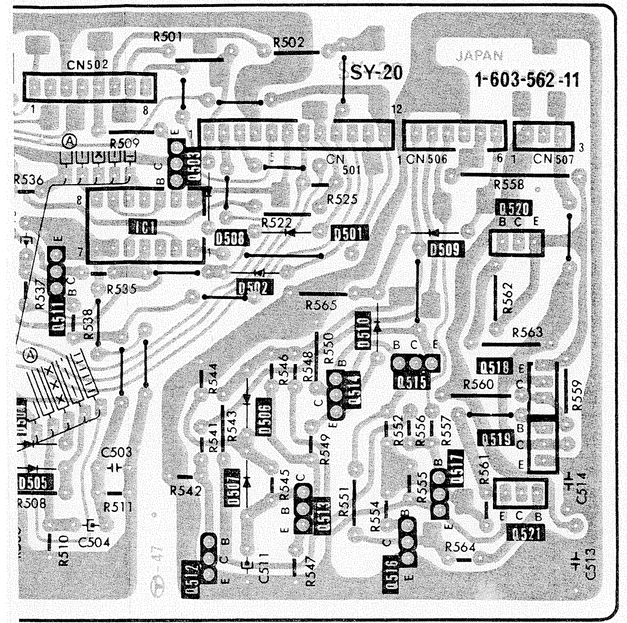
RL-2 BOARD


RL-2
BRN
ORG
RED
1-603-595-

ƆARDS

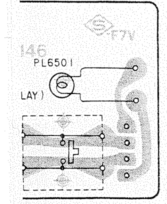
): 6800 series NF-3 BOARD: 9200 series –

511 503 IC1 513 514 515 516 517 520 518 521 , 519	Q , IC
504,505 508 502 506,507 501 510 509	D

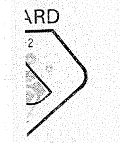


CN502
R501
R502
SY-20
JAPAN
1-603-562-11
CN 501
CN506
CN507
R509
R536
R558
R525
R522
Q520
Q501
Q509
Q508
IC1
Q502
R535
R565
R563
R562
R537
R538
Q510
Q518
Q515
R560
R559
C503
R541
R543
R544
R546
R548
R550
Q514
Q505
R508
R511
R542
R545
R549
R552
R556
R557
Q519
R561
C514
R510
C504
Q512
C511
R547
R551
R554
R555
Q517
Q516
R564
Q521
C513

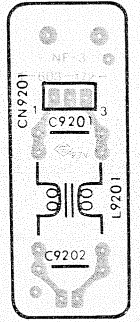
ARD



ARD

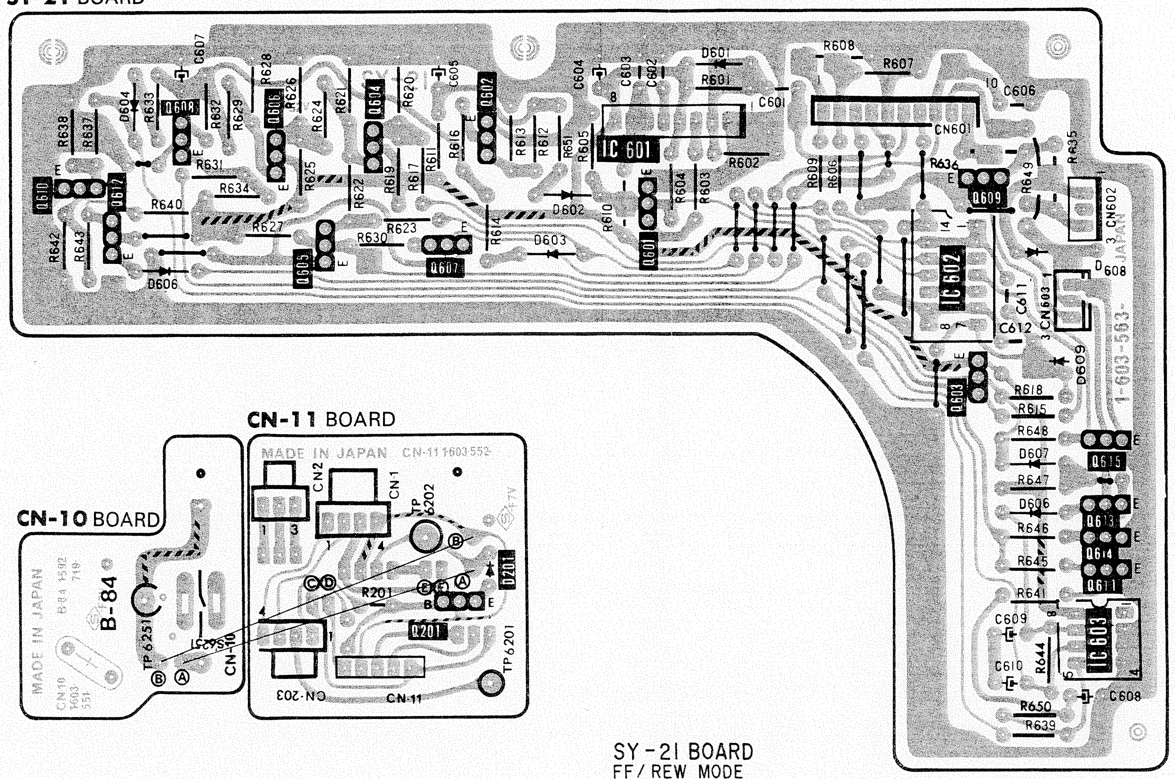


NF-3 BOARD



NF-3
CN9201
C9201
L9201
C9202

SY-21 BOARD



C607
R628
R626
R629
R632
Q608
R633
D604
R637
R638
Q610
Q612
R642
R643
R640
R631
R634
R627
R625
R624
R621
Q606
Q604
R620
R622
R619
R617
R616
R611
C605
Q602
R613
R612
R651
R605
C604
C603
C602
D601
R601
C601
IC 601
R608
R607
C606
CN601
R602
R604
R603
R609
R606
R636
Q609
R649
R635
CN602
R623
R630
Q607
R614
D602
D603
R610
Q601
Q605
D606
IC 602
C611
C612
CN603
D608
D609
1-603-563-
Q603
R618
R615
R648
D607
R647
D606
R646
R645
R641
Q615
Q613
Q614
Q611
C609
C610
R644
IC 603
C608
R650
R639

CN-11 BOARD

CN-10 BOARD

MADE IN JAPAN CN-11 1603552
CN2
CN1
TP 6202
Q201
R201
Q201
TP6201
CN-203
CN 11
MADE IN JAPAN
B-84
TP6251
CN-10

SY-21 BOARD
FF/ REW MODE

IC602

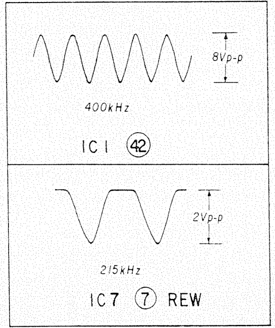
PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
VOLTAGE	0	0	12	0	12	9.1	GND	9.1	9.1	0	12	0	0	11.5

IC603

PIN	1	2	3	4	5	6	7	8
VOLTAGE	/	/	/	GND	2.5	4.5	1.4	11.5

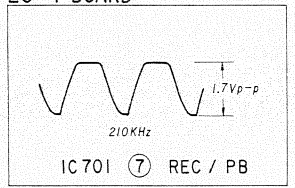
Q	603	608	609	610	612	613	614	615
B	11.5	4.3	0	0.6	0	3.5	0	12
C	12	GND	12	0	11.5	GND	2.4	11.5
E	11.5	5.8	GND	GND	0	2.4	GND	11.5

SY-19 BOARD



8Vp-p
400kHz
IC1 ㊷
2Vp-p
215kHz
IC7 ⑦ REW

ES-1 BOARD



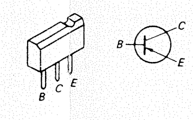
1.7Vp-p
210KHz
IC701 ⑦ REC / PB

The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

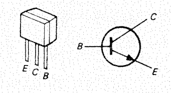
NOTES:

- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000Ω; MΩ = 1000kΩ
- All capacitors are in μF unless otherwise noted. p : μμF 50WV or less are not indicated except for electrolytics.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊡ : nonflammable resistor.
- The red lines show the main voltages.

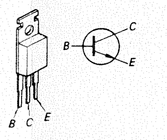
2SB822



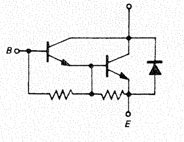
2SC2785



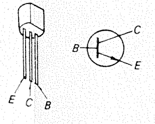
2SC1061



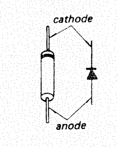
2SD985



2SC1364

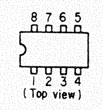


1S1555
1SS119
10E1
RD8.2E-B
RD13E-B



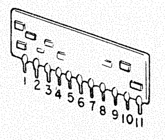
cathode
anode

μPC4558C



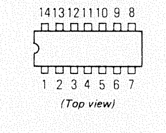
8 7 6 5
1 2 3 4
(Top view)

BX342



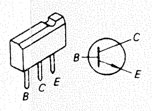
1 2 3 4 5 6 7 8 9 10 11

TC4011BP
TC4013BP
TC4081BP
TC4069UBP

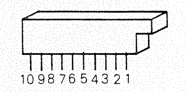


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

2SC2021
2SD1055

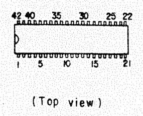


10E10P



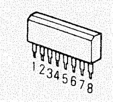
10 9 8 7 6 5 4 3 2 1

μPD546C

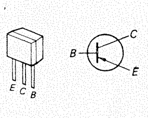


42 40 35 30 25 22
1 5 10 15 21
(Top view)

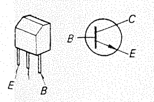
M51848L



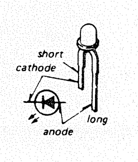
2SA1175



2SC2315
2SD773



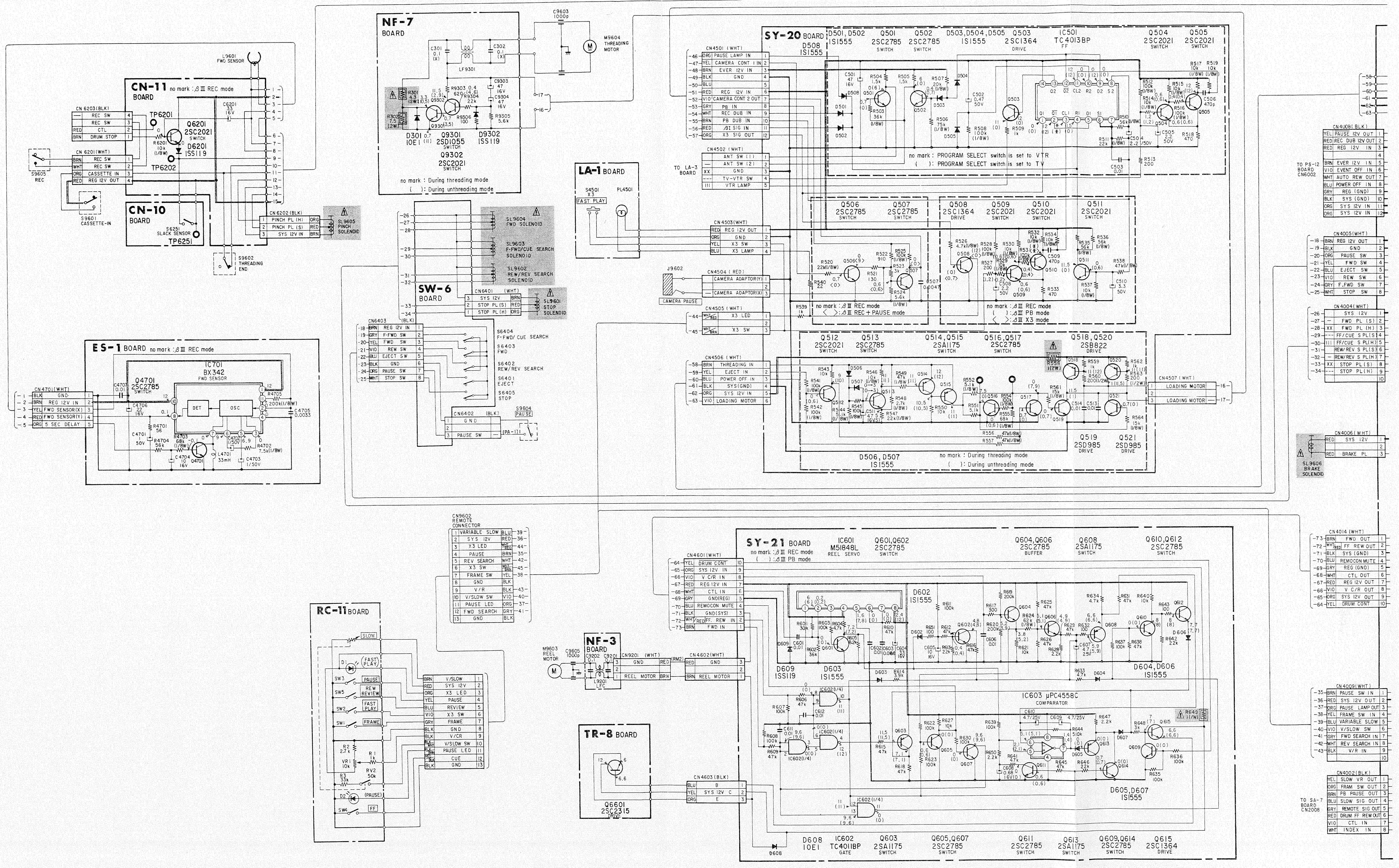
TLR123
TLY123



short
cathode
long
anode

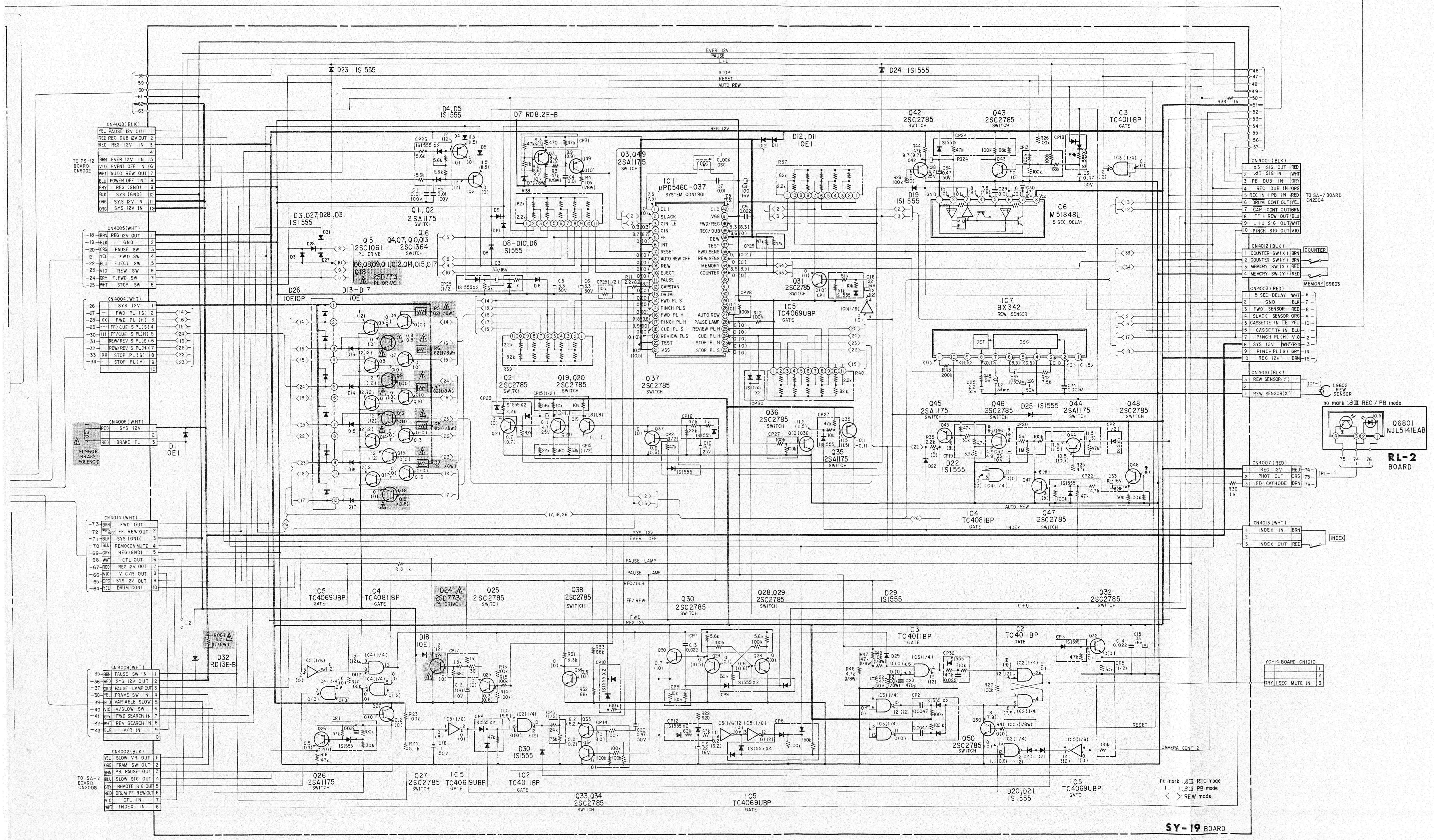
SY-19, SY-20, SY-21 (SYSTEM CONTROL), CN-10, CN-11 (SLACK SENSOR, RELAY), ES-1 (FWD SENSOR), SW-6 (SWITCH, RELAY), RC-11 (REMOTE CONTROL), LA-1 (LAMP), TR-8, NF-7, RL-2 AND NF-3 BOARDS SCHEMATIC DIAGRAM

– Ref. No. SY-19 BOARD: 4000 series SY-20 LA-1 BOARD: 4500 series SY-21 BOARD: 4600 series CN-10 BOARD: 6251 series CN-11 BOARD: 6200 series ES-1 BOARD: 4700 series SW-6 BOARD: 6400 series TR-8 BOARD: 6600 series NF-7 BOARD: 9300 series RL-2 BOARD: 6800 series NF-3 BOARD: 9200 s


CN-11 BOARD
no mark : β III REC mode
CN-10 BOARD
ES-1 BOARD
IC701 BX342 FWD SENSOR
NF-7 BOARD
M9604 THREADING MOTOR
SW-6 BOARD
SL9604 FWD SOLENOID
SL9603 F-FWD/CUE SEARCH SOLENOID
SL9602 REW/REV SEARCH SOLENOID
SL9601 STOP SOLENOID
SL9605 PINCH SOLENOID
LA-1 BOARD
S4501 FAST PLAY
SY-20 BOARD
IC501 TC4013BP FF
no mark : PROGRAM SELECT switch is set to VTR
( ) : PROGRAM SELECT switch is set to TV
no mark : During threading mode
( ) : During unthreading mode
SL9606 BRAKE SOLENOID
CN9602 REMOTE CONNECTOR
RC-11 BOARD
NF-3 BOARD
M9603 REEL MOTOR
TR-8 BOARD
Q6601 2SC2315
SY-21 BOARD
IC601 M51848L REEL SERVO
IC603 μPC4558C COMPARATOR
IC602 TC4011BP GATE
TO PS-12 BOARD CN6002
TO SA-7 BOARD CN2008

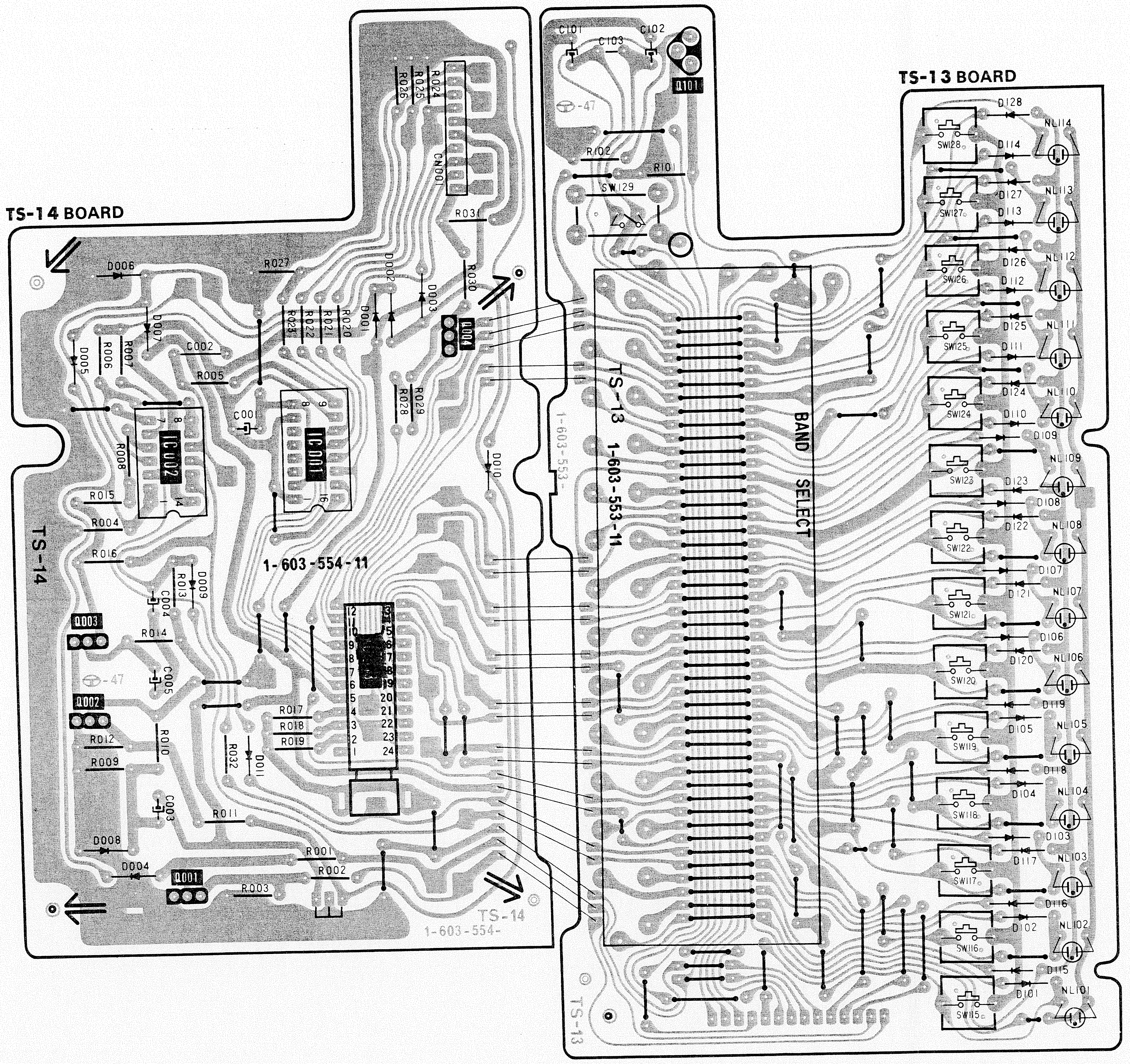
ATIC DIAGRAM

6800 series NF-3 BOARD: 9200 series CHASSIS: 9600 series –


D23 1S1555
D24 1S1555
CN4008 (BLK)
TO PS-12 BOARD CN6002
CN4005 (WHT)
CN4004 (WHT)
CN4006 (WHT)
SL9606 BRAKE SOLENOID
D1 10E1
CN4014 (WHT)
CN4009 (WHT)
CN4002 (BLK)
TO SA-7 BOARD CN2008
D4, D5 1S1555
D7 RD8.2E-B
Q1, Q2 2SA1175
D3, D27, D28, D31 1S1555
Q5 2SC1061 PL DRIVE
Q4, Q7, Q10, Q13, Q16 2SA1364 SWITCH
Q6, Q8, Q9, Q11, Q12, Q14, Q15, Q17
Q18 2SD773 PL DRIVE
D8-D10, D6 1S1555
D26 10E10P
D13-D17 10E1
Q3, Q49 2SA1175 SWITCH
IC1 μPD546C-037 SYSTEM CONTROL
D12, D11 10E1
Q21 2SC2785 SWITCH
Q19, Q20 2SC2785 SWITCH
Q37 2SC2785 SWITCH
Q31 2SC2785
IC5 TC4069UBP GATE
IC7 BX342 REW SENSOR
Q36 2SC2785 SWITCH
Q35 2SA1175
Q42 2SC2785 SWITCH
Q43 2SC2785 SWITCH
IC3 TC4011BP GATE
D19 1S1555
IC6 M51848L 5 SEC DELAY
CN4001 (BLK)
TO SA-7 BOARD CN2004
CN4012 (BLK)
COUNTER
MEMORY S9603
CN4003 (RED)
CN4010 (BLK)
L9602 REW SENSOR
no mark : βⅢ REC / PB mode
Q6801 NJL5141EAB
RL-2 BOARD
Q45 2SA1175 SWITCH
Q46 2SC2785 SWITCH
D25 1S1555
Q44 2SA1175 SWITCH
Q48 2SC2785 SWITCH
D22 1S1555
CN4007 (RED)
IC4 TC4081BP GATE
Q47 2SC2785 SWITCH
CN4013 (WHT)
INDEX
IC5 TC4069UBP GATE
IC4 TC4081BP GATE
Q24 2SD773 PL DRIVE
Q25 2SC2785 SWITCH
Q38 2SC2785 SWITCH
Q30 2SC2785 SWITCH
Q28, Q29 2SC2785 SWITCH
D29 1S1555
Q32 2SC2785 SWITCH
D18 10E1
D32 RD13E-B
IC3 TC4011BP GATE
IC2 TC4011BP GATE
YC-14 BOARD CN1010
Q26 2SA1175 SWITCH
Q27 2SC2785 SWITCH
IC5 TC4069UBP GATE
IC2 TC4011BP GATE
D30 1S1555
Q33, Q34 2SC2785 SWITCH
IC5 TC4069UBP GATE
Q50 2SC2785 SWITCH
D20, D21 1S1555
IC5 TC4069UBP GATE
no mark : βⅢ REC mode
( ) : βⅢ PB mode
< > : REW mode
SY-19 BOARD

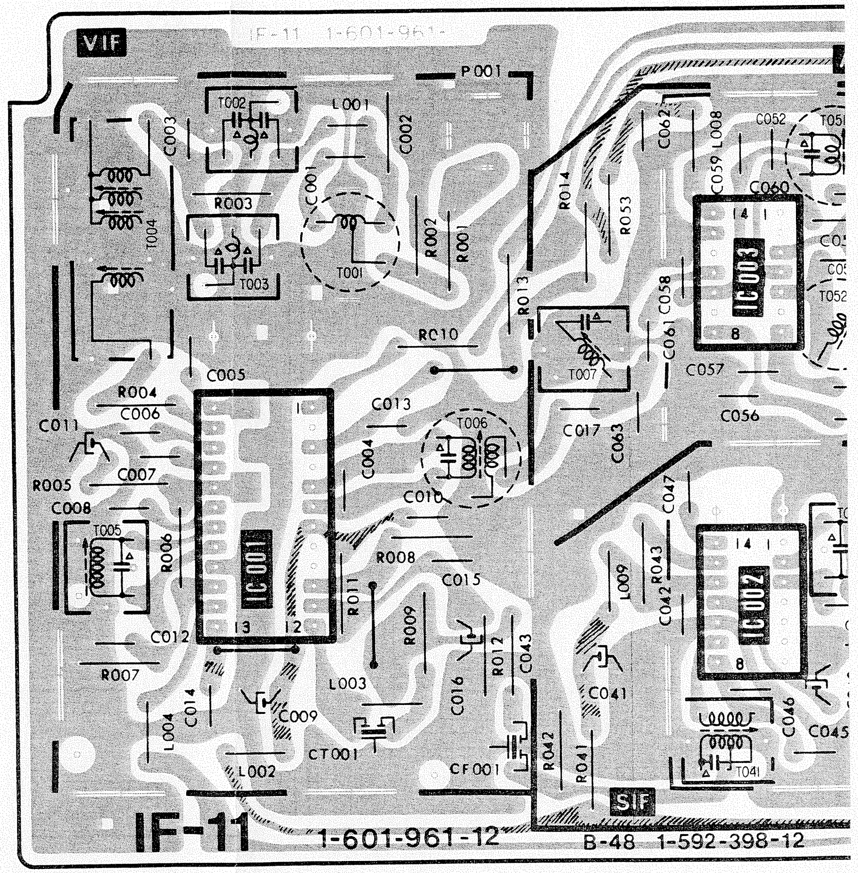
TS-13 (CHANNEL PRESET, CHANNEL SELECT), TS-14 (AUTO PROGRAM SERCH), IF-11 (VIF, SIF, AFT), TU-15, TU-16 (TUNER AGC, BAND SELECTOR) AND TB-1 (DC CONVERTER) PRINTED WIRING BOARDS

– Ref. No. TS-13, TS-14 BOARD: 3000 series IF-11 BOARD: 7000 series TU-15, TU-16 BOARD: 9100 series TB-1 BOARD: 9000 series –

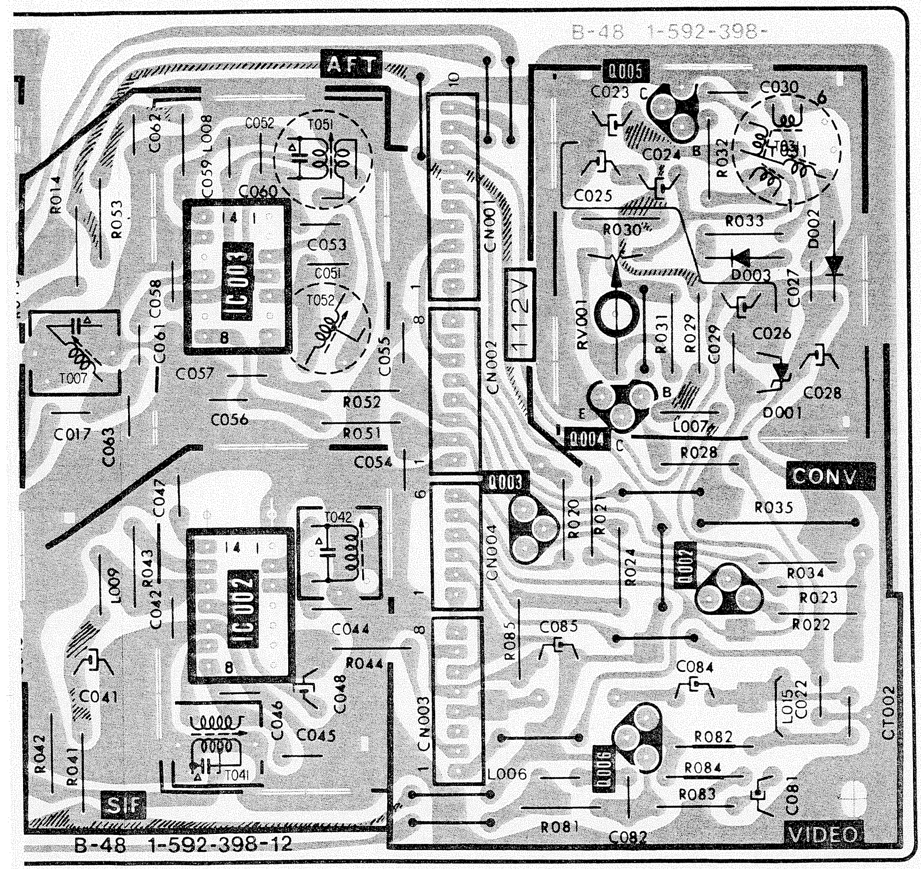

TS-14 BOARD
TS-13 BOARD
TS-14
1-603-554-11
TS-13 1-603-553-11
BAND SELECT
IC001
IC002
Q001
Q002
Q003
Q004
Q101
CN001
SW115
SW116
SW117
SW118
SW119
SW120
SW121
SW122
SW123
SW124
SW125
SW126
SW127
SW128
SW129
NL101
NL114
D101
D128
R101
R102
C101
C102
C103
TS-14 1-603-554-
TS-13

IF-11 BOARD

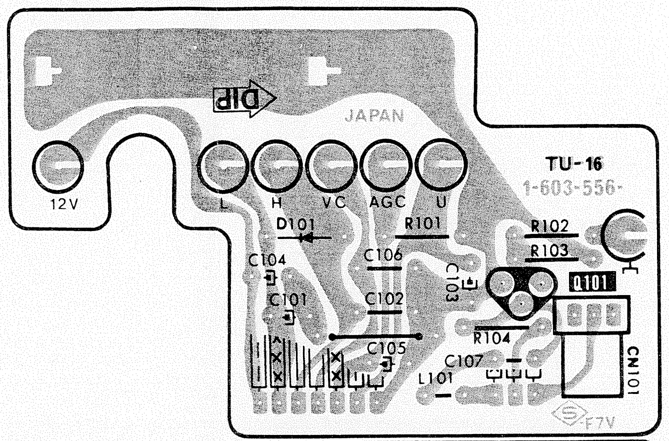
Q, IC	IC001	IC003 IC002
D		
ADJ		


VIF
SIF
IF-11 1-601-961-12
B-48 1-592-398-12
IC001
IC002
IC003
T001
T002
T003
T004
T005
T006
T007
CF001
CT001
P001

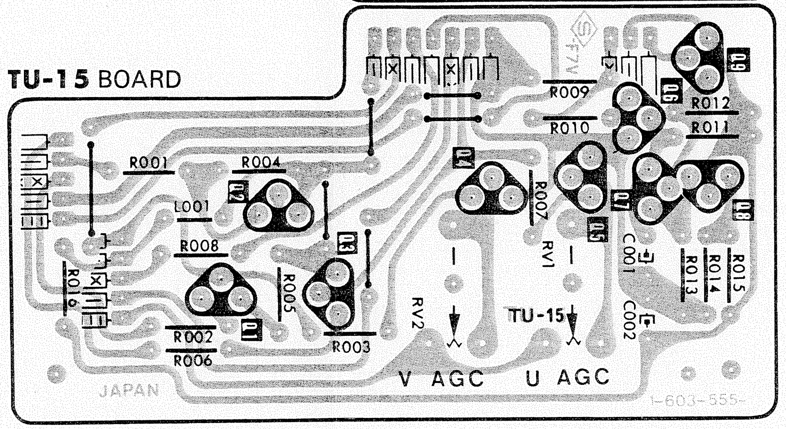
IC003 IC002	003	004 006	005 002	Q , IC
			003,001,002	D
			RV001	ADJ


B-48 1-592-398-
AFT
CONV
SIF
VIDEO
B-48 1-592-398-12
IC003
IC002
Q005
Q004
Q003
Q002
Q006
T051
T052
T042
T041
T007
RV001
CN001
CN002
CN003
CN004
CT002
L006
L007
L008
L009
D001
D002
D003
11.2V

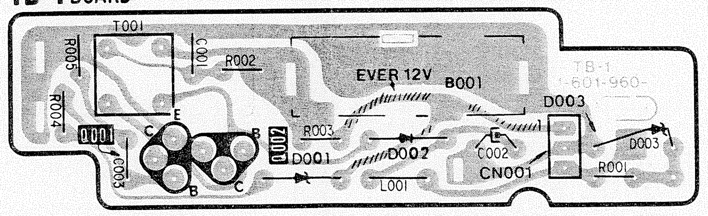
TU-16 BOARD


JAPAN
TU-16
1-603-556-
12V
L
H
VC
AGC
U
D101
R101
R102
R103
R104
C101
C102
C103
C104
C105
C106
C107
L101
Q101
CN101
F7V

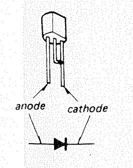
TU-15 BOARD


R001
R002
R003
R004
R005
R006
R007
R008
R009
R010
R011
R012
R013
R014
R015
R016
L001
C001
C002
RV1
RV2
TU-15
V AGC
U AGC
JAPAN
1-603-555-

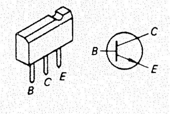
TB-1 BOARD


T001
C001
R002
R003
R004
R005
EVER 12V
B001
TB-1
1-601-960-
D001
D002
D003
Q001
Q002
C002
CN001
L001
R001
E
C
B

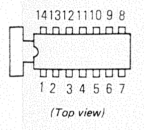
µPC574J


anode
cathode

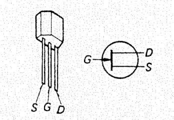
2SC2021



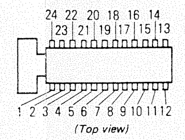
CX095C


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

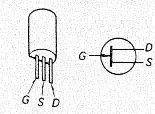
2SK23A



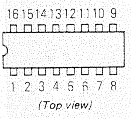
CX177B
CX804


24 22 20 18 16 14
23 21 19 17 15 13
1 2 3 4 5 6 7 8 9 10 11 12
(Top view)

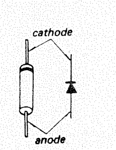
2SK43



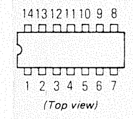
MB84520B


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)

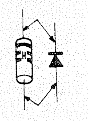
1S1555
RD5.1E-B
RD7.5E-B


cathode
anode

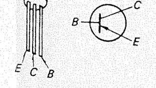
TA7070P
TC4011BP


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

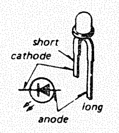
1SS82



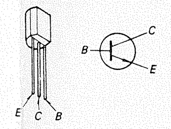
2SA733



TLR124

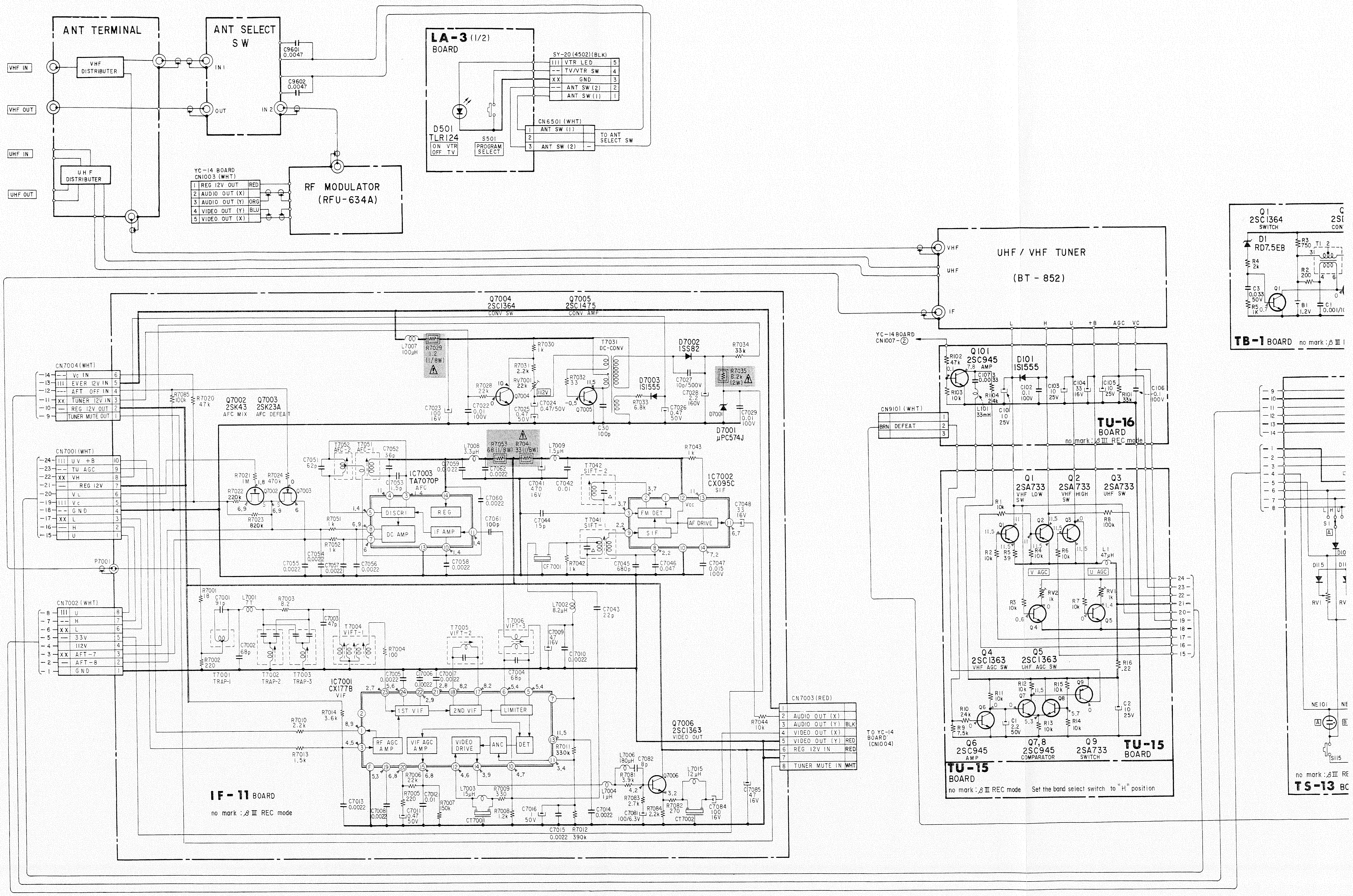

short
cathode
long
anode

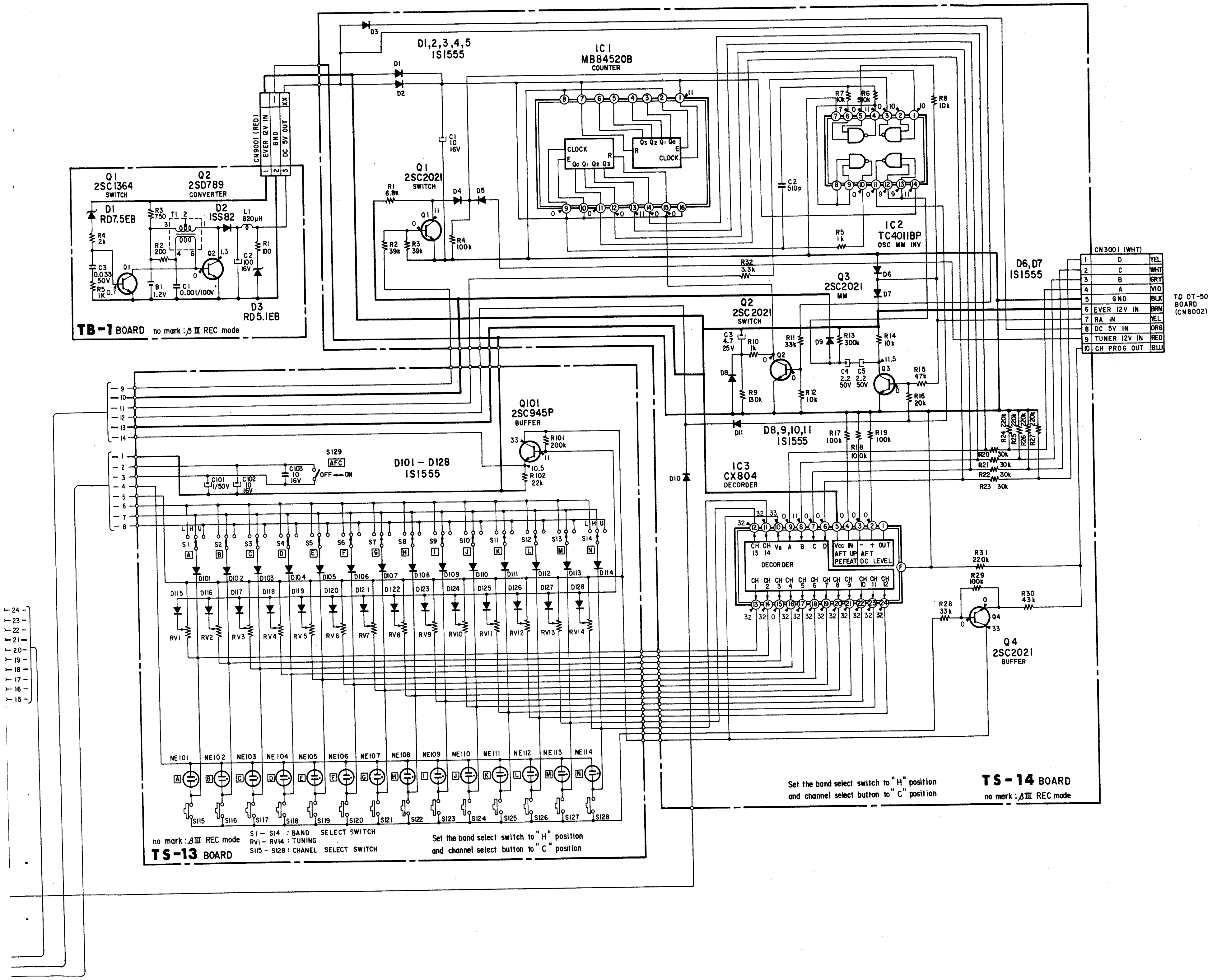
2SC945
2SC945P
2SC1363
2SC1364
2SC1475



TS-13 (CHANNEL PRESET, CHANNEL SELECT), TS-14 (AUTO PROGRAM SERCH), IF-11 (VIF, SIF, AFT), TU-15, TU-16 (TUNER AGC, BAND SELECTOR) AND TB-1 (DC CONVERTER) BOARDS SCHEMATIC DIAGRAM

– Ref. No. TS-13, TS-14 BOARD: 3000 series IF-11 BOARD: 7000 series TU-15, TU-16 BOARD: 9100 series TB-1 BOARD: 9000 series CHASSIS: 9600 series –


ANT TERMINAL
VHF IN
VHF OUT
UHF IN
UHF OUT
VHF DISTRIBUTER
UHF DISTRIBUTER
ANT SELECT SW
IN 1
OUT
IN 2
C9601 0.0047
C9602 0.0047
YC-14 BOARD CN1003 (WHT)
1 REG 12V OUT RED
2 AUDIO OUT (X)
3 AUDIO OUT (Y) ORG
4 VIDEO OUT (Y) BLU
5 VIDEO OUT (X)
RF MODULATOR (RFU-634A)
LA-3 (1/2) BOARD
SY-20 (4502) (BLK)
VTR LED 5
TV/VTR SW 4
GND 3
ANT SW (2) 2
ANT SW (1) 1
CN6501 (WHT)
1 ANT SW (1)
2
3 ANT SW (2)
TO ANT SELECT SW
D501 TLR124
ON VTR OFF TV
S501 PROGRAM SELECT
UHF / VHF TUNER (BT-852)
VHF
UHF
IF
L H U +B AGC VC
Q7004 2SC1364 CONV SW
Q7005 2SC1475 CONV AMP
L7007 100μH
R7029 1.2 (1/8W)
T7031 DC-CONV
D7002 1SS82
R7034 33k
D7003 1S1555
R7035 8.2k (2W)
D7001 μPC574J
CN7004 (WHT)
Vc IN 6
EVER 12V IN 5
AFT OFF IN 4
TUNER 12V IN 3
REG 12V OUT 2
TUNER MUTE OUT 1
Q7002 2SK43 AFC MIX
Q7003 2SK23A AFC DEFEAT
CN7001 (WHT)
UV +B 10
TU AGC 9
VH 8
REG 12V 7
VL 6
Vc 5
GND 4
L 3
H 2
U 1
IC7003 TA7070P
DISCRI
REG
DC AMP
IF AMP
R7053 68 (1/8W)
R7041 33 (1/8W)
T7042 SIFT-2
T7041 SIFT-1
IC7002 CX095C SIF
FM DET
AF DRIVE
SIF
CF7001
P7001
CN7002 (WHT)
U 8
H 7
L 6
33V 5
112V 4
AFT-7 3
AFT-8 2
GND 1
T7001 TRAP-1
T7002 TRAP-2
T7003 TRAP-3
T7004 VIFT-1
T7005 VIFT-2
T7006 VIFT-3
IC7001 CX177B VIF
1ST VIF
2ND VIF
LIMITER
RF AGC AMP
VIF AGC AMP
VIDEO DRIVE
ANC
DET
Q7006 2SC1363 VIDEO OUT
CN7003 (RED)
2 AUDIO OUT (X)
3 AUDIO OUT (Y) BLK
4 VIDEO OUT (X)
5 VIDEO OUT (Y) RED
6 REG 12V IN RED
8 TUNER MUTE IN WHT
TO YC-14 BOARD (CN1004)
IF-11 BOARD
no mark : β III REC mode
YC-14 BOARD CN1007-②
Q101 2SC945 AMP
D101 1S1555
CN9101 (WHT)
BRN DEFEAT
L101 33mH
TU-16 BOARD
no mark : β III REC mode
Q1 2SA733 VHF LOW SW
Q2 2SA733 VHF HIGH SW
Q3 2SA733 UHF SW
V AGC
U AGC
Q4 2SC1363 VHF AGC SW
Q5 2SC1363 UHF AGC SW
Q6 2SC945 AMP
Q7,8 2SC945 COMPARATOR
Q9 2SA733 SWITCH
TU-15 BOARD
TU-15 BOARD
no mark : β III REC mode Set the band select switch to "H" position
Q1 2SC1364 SWITCH
D1 RD7.5EB
TB-1 BOARD no mark : β III
TS-13


Q1
2SC1364
SWITCH
Q2
2SD789
CONVERTER
D1
RD7.5EB
D2
1SS82
L1
820μH
D3
RD5.1EB
TB-1 BOARD no mark : βIII REC mode
CN9001 (RED)
EVER 12V IN
GND
DC 5V OUT
D1,2,3,4,5
1S1555
IC1
MB84520B
COUNTER
CLOCK
Q1
2SC2021
SWITCH
IC2
TC4011BP
OSC MM INV
Q3
2SC2021
MM
Q2
2SC2021
SWITCH
D6,D7
1S1555
CN3001 (WHT)
1 D YEL
2 C WHT
3 B GRY
4 A VIO
5 GND BLK
6 EVER 12V IN BRN
7 RA IN YEL
8 DC 5V IN ORG
9 TUNER 12V IN RED
10 CH PROG OUT BLU
TO DT-50 BOARD (CN8002)
D8,9,10,11
1S1555
IC3
CX804
DECORDER
Q4
2SC2021
BUFFER
Q101
2SC945P
BUFFER
S129
AFC
OFF ←→ ON
D101 – D128
1S1555
TS-14 BOARD
no mark : βIII REC mode
Set the band select switch to "H" position and channel select button to "C" position
TS-13 BOARD
no mark : βIII REC mode
S1 – S14 : BAND SELECT SWITCH
RV1 – RV14 : TUNING
S115 – S128 : CHANEL SELECT SWITCH
Set the band select switch to "H" position and channel select button to "C" position

The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

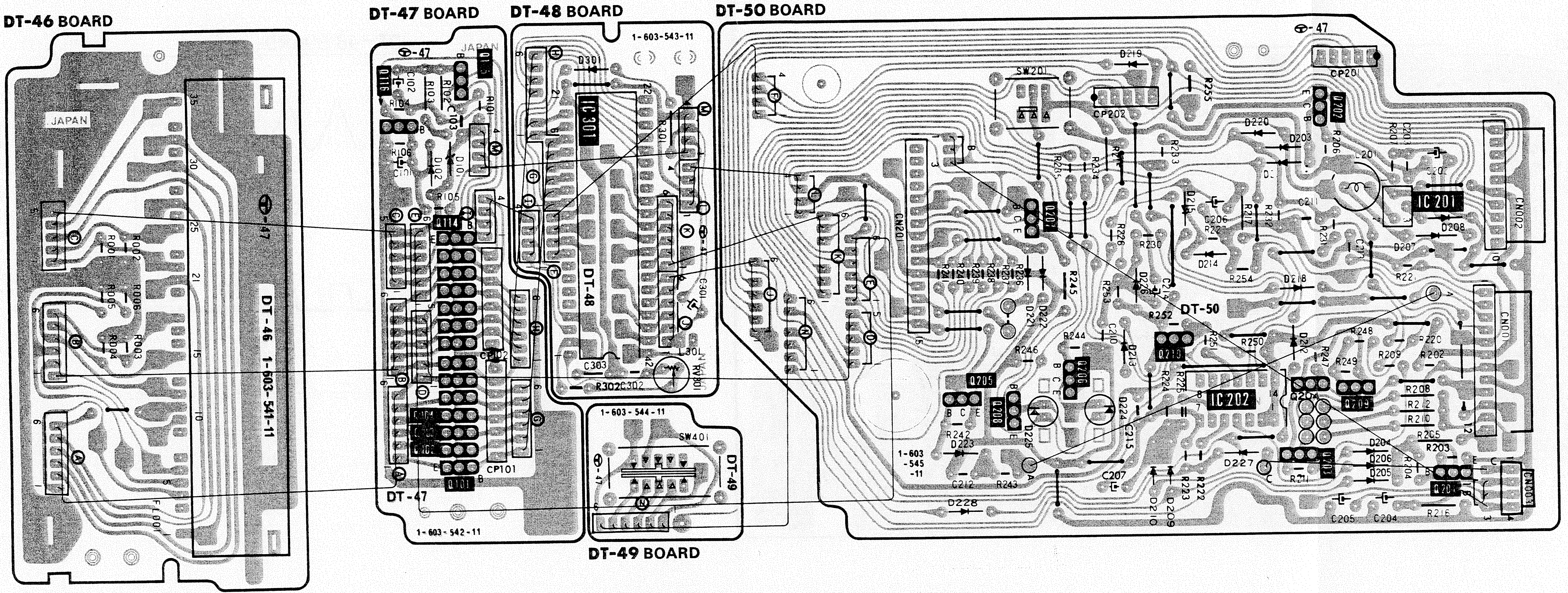
NOTES:

- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000Ω; MΩ = 1000kΩ
- All capacitors are in μF unless otherwise noted. p : μμF 50WV or less are not indicated except for electrolytics.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ▭ : nonflammable resistor.
- The red lines show the main voltages.

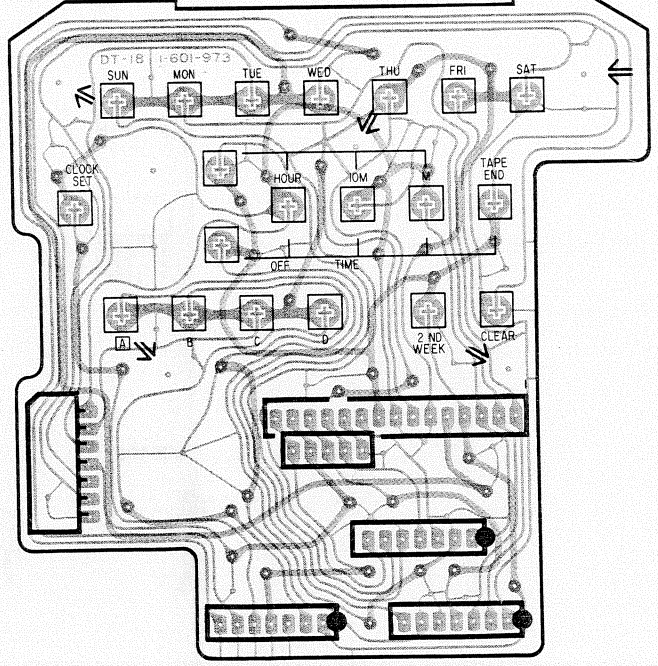
DT-46, DT-47, DT-48, DT-49, DT-50 AND DT-18 (PROGRAM TIMER), PS-12 (POWER SUPPLY), LF-9 (LINE FILTER), TR-1, TR-5 AND TR-7 (POWER TRANSISTOR) PRINTED WIRING BOARDS

– Ref. No. DT-46, DT-47, DT-48, DT-49, DT-50 AND DT-18 BOARDS: 8000 series PS-12 BOARD: 6000 series LF-9 BOARD: 6100 series TR-1 BOARD: 6301 series TR-5 BOARD: 6311 series TR-7 BOARD: 6321 series

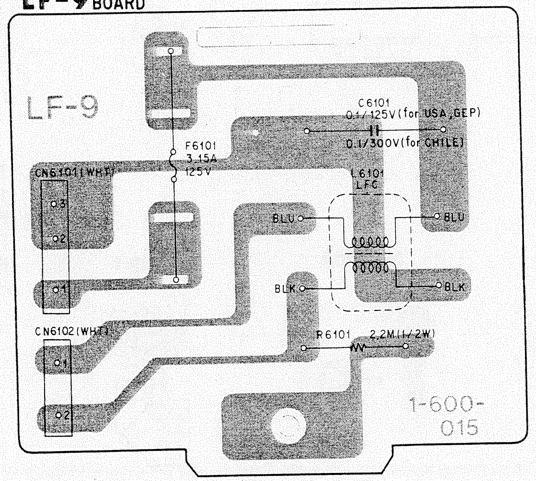
Q, IC	205 207 208 206 210 IC202 202 204 203 209 IC201 201	Q, IC
D	223 228 221, 222 225 213 224 226 215 214 220 227 203 211 218 212 204 206 205 208 207	D


DT-46 BOARD
DT-47 BOARD
DT-48 BOARD
DT-50 BOARD
DT-49 BOARD
JAPAN
DT-46 1-603-541-11
DT-47
1-603-542-11
DT-48
1-603-543-11
IC301
DT-49
1-603-544-11
SW401
DT-50
1-603-545-11
IC201
IC202
CN201
CN202
CN001
CP101
CP201
CP202
SW201

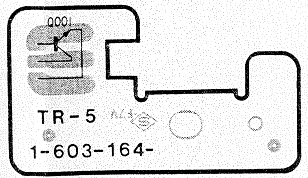
DT-18 BOARD


DT-18 1-601-973
SUN
MON
TUE
WED
THU
FRI
SAT
CLOCK SET
HOUR
10M
M
TAPE END
OFF
TIME
A
B
C
D
2 ND WEEK
CLEAR

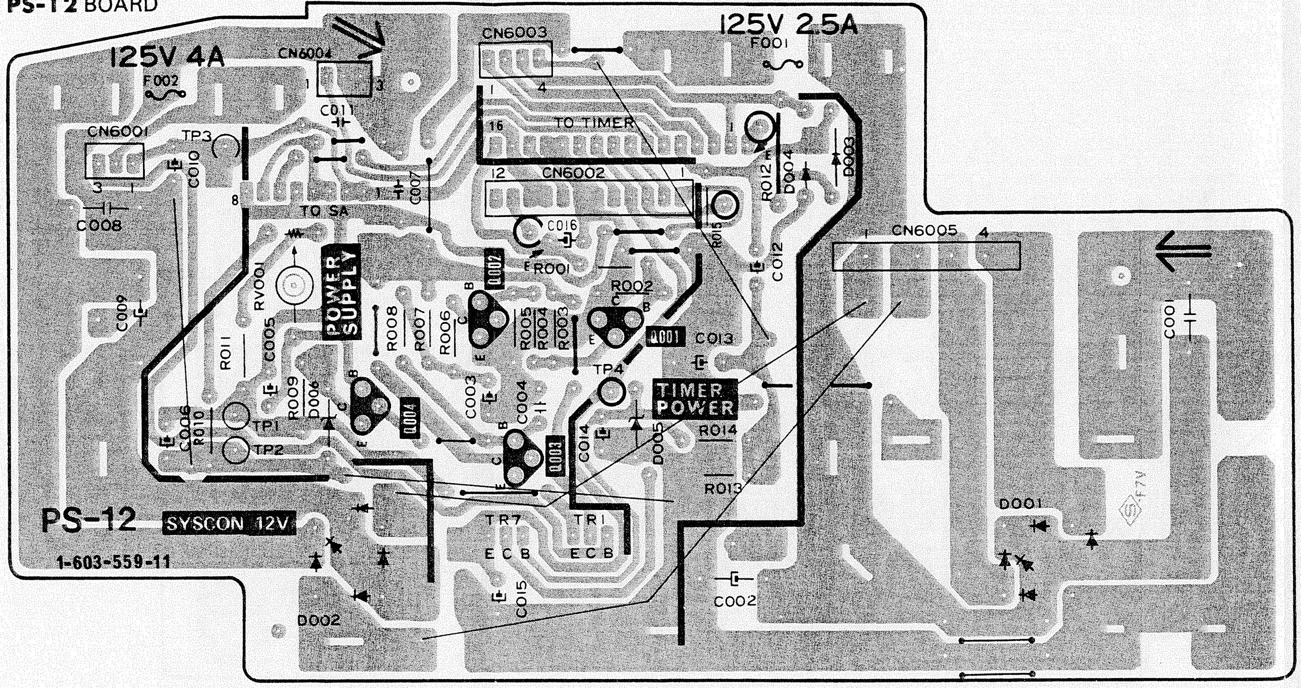
LF-9 BOARD


LF-9
C6101
0.1/125V (for USA, GEP)
0.1/300V (for CHILE)
F6101
3.15A
125V
CN6101 (WHT)
L6101
LFC
BLU
BLK
CN6102 (WHT)
R6101 2.2M (1/2W)
1-600-015

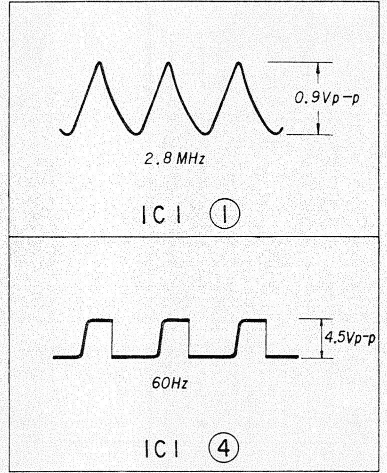
TR-5 BOARD


Q001
TR-5
1-603-164-

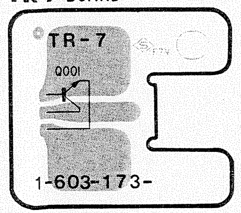
PS-12 BOARD


125V 4A
F002
CN6004
CN6003
125V 2.5A
F001
CN6001
TP3
C010
C011
C008
TO TIMER
16
12
CN6002
TO SA
C007
R012
D004
D003
C016
R015
C012
CN6005
RV001
POWER SUPPLY
R001
R002
Q002
R008
R007
R006
R005
R004
R003
Q001
C013
C009
R011
C005
TP4
C001
R009
D006
Q004
C003
C004
Q003
C014
D005
TIMER POWER
R014
C006
R010
TP1
TP2
R013
PS-12
SYSCON 12V
TR7
TR1
E C B
E C B
D001
1-603-559-11
C015
C002
D002

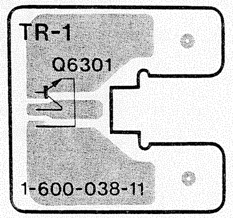
DT-48 BOARD



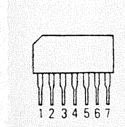
TR-7 BOARD


TR-7
Q001
1-603-173-

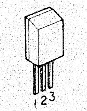
TR-1 BOARD


TR-1
Q6301
1-600-038-11

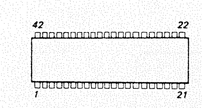
µPA54H



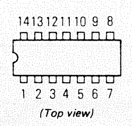
µPC78L05A



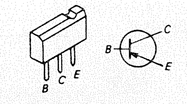
MB8841-180



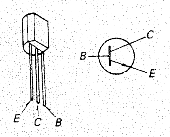
TC4011BP
TC4081BP


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

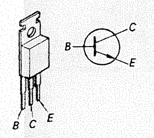
2SA937



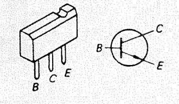
2SC945



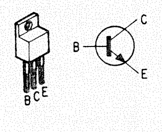
2SC1061



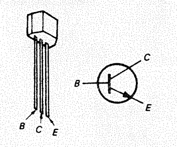
2SC2021



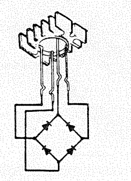
2SC2315



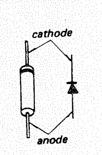
2SC2458



M4B41

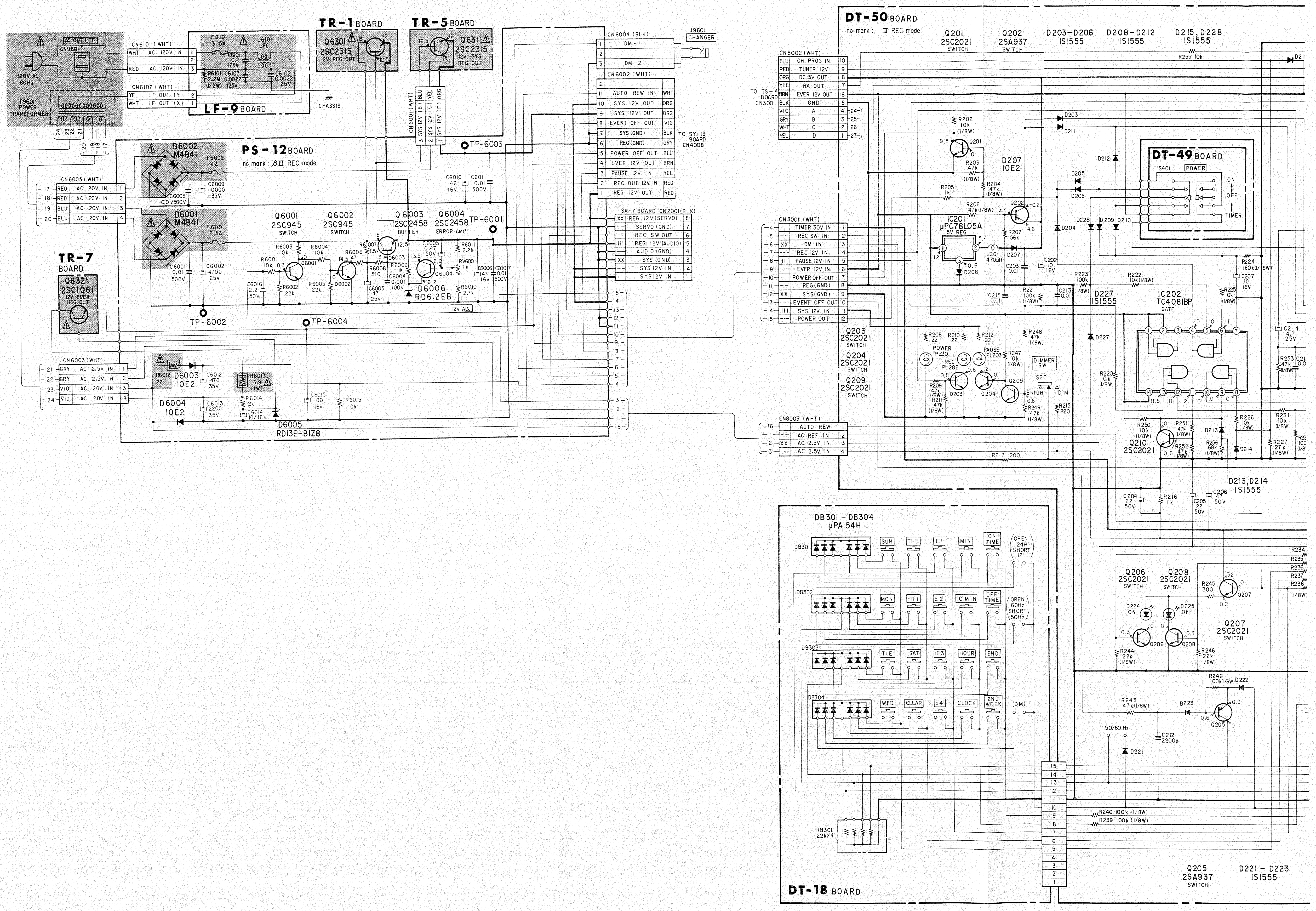


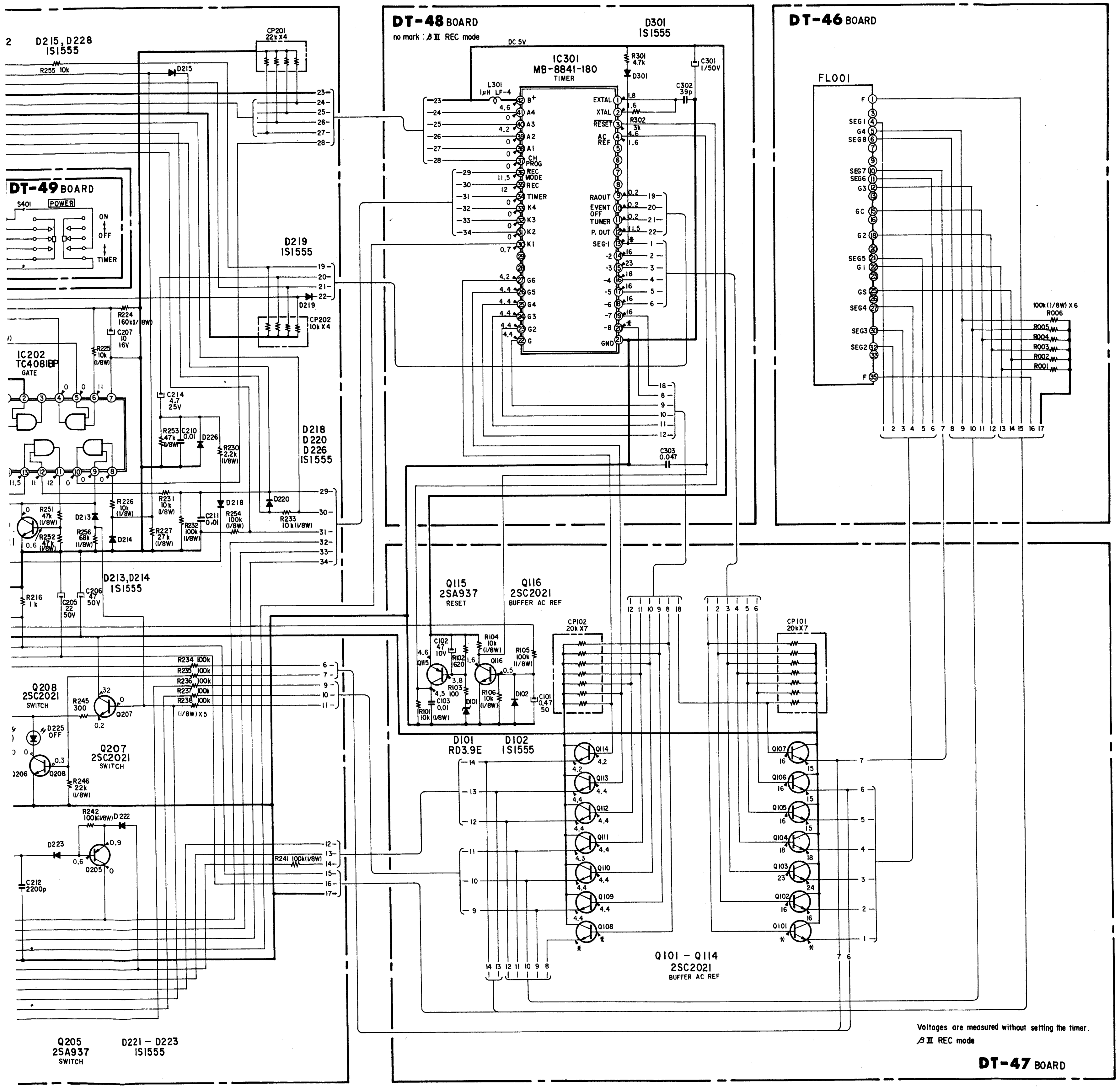
1S1555
10E2
RD3.9E
RD6.2E-B
RD13E-B1Z8


cathode
anode

DT-46, DT-47, DT-48, DT-49, DT-50 AND DT-18 (PROGRAM TIMER), PS-12 (POWER SUPPLY), LF-9 (LINE FILTER), TR-1, TR-5 AND TR-7 (POWER TRANSISTOR) BOARDS SCHEMATIC DIAGRAM

– Ref. No. DT-46, DT-47, DT-48, DT-49, DT-50 AND DT-18 BOARDS: 8000 series PS-12 BOARD: 6000 series LF-9 BOARD: 6100 series TR-1 BOARD: 6301 series TR-5 BOARD: 6311 series TR-7 BOARD: 6321 series CHASSIS: 9600 series –


AC OUT LET
CN9601
120V AC 60Hz
T9601 POWER TRANSFORMER
CN6101 (WHT)
CN6102 (WHT)
F6101 3.15A
L6101 LFC
LF-9 BOARD
CHASSIS
TR-1 BOARD
Q6301 2SC2315 12V REG OUT
TR-5 BOARD
Q6311 2SC2315 12V SYS REG OUT
CN6004 (BLK)
CN6002 (WHT)
J9601 CHANGER
TO SY-19 BOARD CN4008
PS-12 BOARD
no mark : βIII REC mode
D6002 M4B41
D6001 M4B41
F6002 4A
F6001 2.5A
CN6005 (WHT)
CN6003 (WHT)
CN6001 (WHT)
TR-7 BOARD
Q6321 2SC1061 12V EVER REG OUT
Q6001 2SC945 SWITCH
Q6002 2SC945 SWITCH
Q6003 2SC2458 BUFFER
Q6004 2SC2458 ERROR AMP
D6006 RD6.2EB
D6003 10E2
D6004 10E2
D6005 RD13E-B1Z8
12V ADJ
TP-6001
TP-6002
TP-6003
TP-6004
SA-7 BOARD CN2001 (BLK)
DT-50 BOARD
no mark : III REC mode
Q201 2SC2021 SWITCH
Q202 2SA937 SWITCH
D203-D206 1S1555
D208-D212 1S1555
D215, D228 1S1555
CN8002 (WHT)
TO TS-14 BOARD CN3001
CN8001 (WHT)
CN8003 (WHT)
IC201 μPC78L05A 5V REG
D207 10E2
D227 1S1555
IC202 TC4081BP GATE
Q203 2SC2021 SWITCH
Q204 2SC2021 SWITCH
Q209 2SC2021 SWITCH
POWER PL201
REC PL202
PAUSE PL203
DIMMER SW
S201
BRIGHT
DIM
Q210 2SC2021
D213, D214 1S1555
DT-49 BOARD
S401 POWER
ON
OFF
TIMER
DB301 - DB304 μPA 54H
SUN
THU
E1
MIN
ON TIME
MON
FRI
E2
10 MIN
OFF TIME
TUE
SAT
E3
HOUR
END
WED
CLEAR
E4
CLOCK
2ND WEEK
OPEN 24H SHORT 12H
OPEN 60Hz SHORT 50Hz
RB301 22k×4
DT-18 BOARD
Q206 2SC2021 SWITCH
Q208 2SC2021 SWITCH
Q207 2SC2021 SWITCH
Q205 2SA937 SWITCH
D221 - D223 1S1555
50/60 Hz


DT-48 BOARD
no mark : βIII REC mode
DC 5V
IC301
MB-8841-180
TIMER
D301
1S1555
R301 4.7k
C301 1/50V
C302 39p
L301 1μH LF-4
R302 3k
EXTAL
XTAL
RESET
AC REF
B+
A4
A3
A2
A1
CH PROG
REC MODE
REC
TIMER
K4
K3
K2
K1
G6
G5
G4
G3
G2
G
RAOUT
EVENT OFF
TUNER
P. OUT
SEG-1
GND
C303 0.047
DT-46 BOARD
FL001
SEG1
G4
SEG8
SEG7
SEG6
G3
GC
G2
SEG5
G1
G5
SEG4
SEG3
SEG2
F
100k(1/8W) X 6
R006
R005
R004
R003
R002
R001
DT-49 BOARD
S401 POWER
ON
OFF
TIMER
D215,D228
1S1555
CP201 22k X 4
R255 10k
D219
1S1555
CP202 10k X 4
IC202
TC4081BP
GATE
R224 160k(1/8W)
C207 10 16V
R225 10k (1/8W)
C214 4.7 25V
R253 47k
C210 0.01
D226
R230 2.2k (1/8W)
D218
D220
D226
1S1555
R251 47k (1/8W)
R252 47k
R256 68k
D213
D214
R226 10k (1/8W)
R231 10k (1/8W)
R227 27k (1/8W)
R232 100k (1/8W)
C211 0.01
R254 100k (1/8W)
R233 10k(1/8W)
D213,D214
1S1555
R216 1k
C205 22 50V
C206 47 50V
R234 100k
R235 100k
R236 100k
R237 100k
R238 100k
(1/8W) X 5
Q208
2SC2021
SWITCH
R245 300
Q207
2SC2021
SWITCH
D225 OFF
R246 22k (1/8W)
R242 100k(1/8W)
D222
D223
C212 2200p
R241 100k(1/8W)
Q205
2SA937
SWITCH
D221 - D223
1S1555
Q115
2SA937
RESET
Q116
2SC2021
BUFFER AC REF
C102 47 10V
R102 620
R104 10k (1/8W)
R105 100k (1/8W)
R103 100
C103 0.01
R101 10k (1/8W)
R106 10k (1/8W)
D102
C101 0.47 50
CP102 20k X 7
CP101 20k X 7
D101
RD3.9E
D102
1S1555
Q101 - Q114
2SC2021
BUFFER AC REF
Voltages are measured without setting the timer.
βIII REC mode
DT-47 BOARD

The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTES:

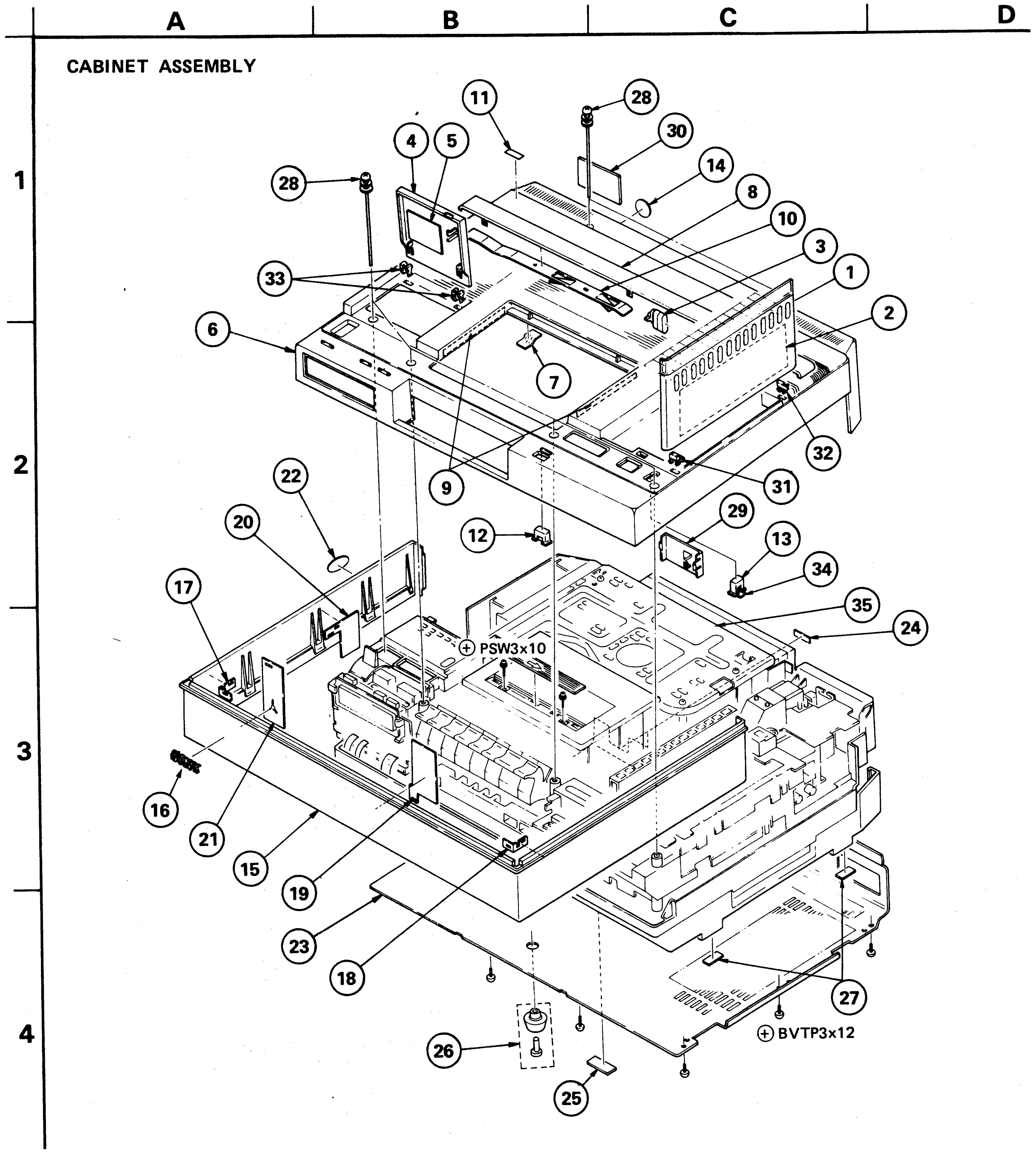
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000Ω; MΩ = 1000kΩ
- All capacitors are in μF unless otherwise noted. p : μμF 50WV or less are not indicated except for electrolytics.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ▭ : nonflammable resistor.
- The red lines show the main voltages.

SECTION 3
EXPLODED VIEWS

Note:

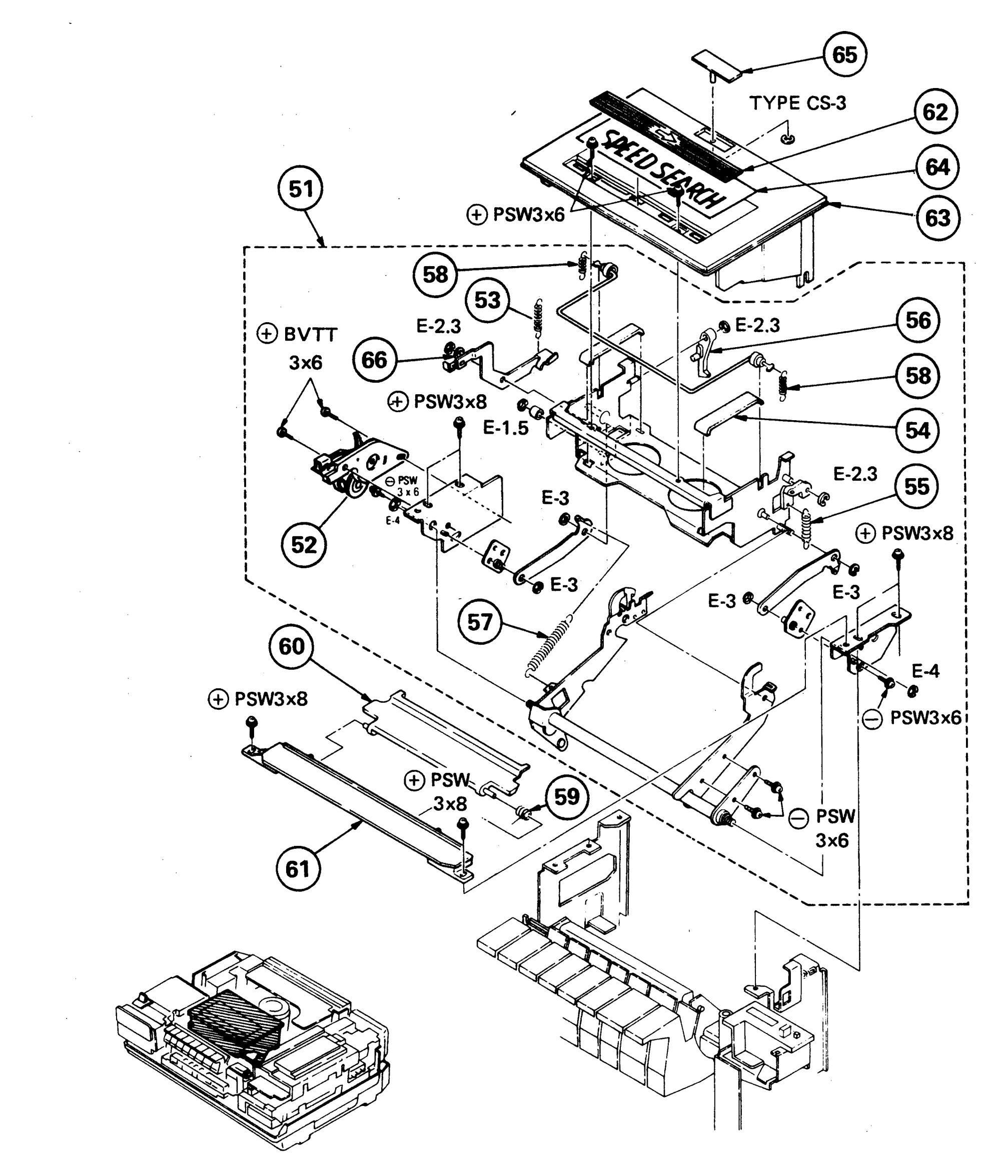
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- As to the part numbered with E-, refer to the electrical parts list.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

CABINET ASSEMBLY



No.	Part No.	Description	Remark
1	X-3665-821-0	DOOR ASS'Y, tuner --------	2
2	3-665-823-00	LABEL, tuner cover	
3	3-661-769-00	BUTTON, preset	
4	X-3665-820-0	COVER ASS'Y, timer -------	5
5	3-661-704-00	LABEL, timer cover	
6	X-3665-801-2	CASE ASS'Y, upper --------	7, 8, 9, 10, 11
7	3-659-748-00	CLOTH, masking, upper case	
8	♦3-661-650-00	BAND, ornamental	
9	3-661-785-11	CUSHION, cassette crevice	
10	♦3-663-020-00	PLATE, ground, upper case	
11	♦3-703-082-31	LABEL, caution	
12	3-661-613-00	KNOB, speed	
13	3-661-614-00	BUTTON, antenna selection	
14	3-703-338-01	LABEL, UL (570F)	
15	X-3661-587-0	FRAME ASS'Y, inner ------	16 – 22
16	3-548-973-00	EMBLEM, SONY	
17	♦3-663-018-00	PLATE (A), ground	
18	♦3-663-019-00	PLATE (B), ground	
19	♦3-663-022-00	PLATE (B), ground, inner frame	
20	♦3-663-024-00	PLATE (C), ground, inner frame	
21	♦3-663-032-00	PLATE (D), ground,	
22	♦3-703-184-00	LABEL, meterial indicating	
23	X-3661-593-0	PLATE ASS'Y, button (W) ----	24, 25
24	3-663-704-00	LABEL, speed selection	
25	3-703-043-21	LABEL, caution main	
26	3-659-768-00	FOOT	
27	3-659-532-00	FELT, foot	
28	3-659-533-00	SCREW, cabinet	
29	3-661-612-00	COVER, switch	
30	♦3-665-840-00	LABEL, model number (W)	(US model)
	♦3-665-841-00	LABEL, model number	(CND model)
31	3-663-718-00	RETAINER (A), hinge	
32	3-663-719-00	RETAINER (B), hinge	
33	3-663-720-00	RETAINER (C), hinge	
34	4-859-909-01	SPACER, switch	
35	♦3-661-757-00	COVER, shield	

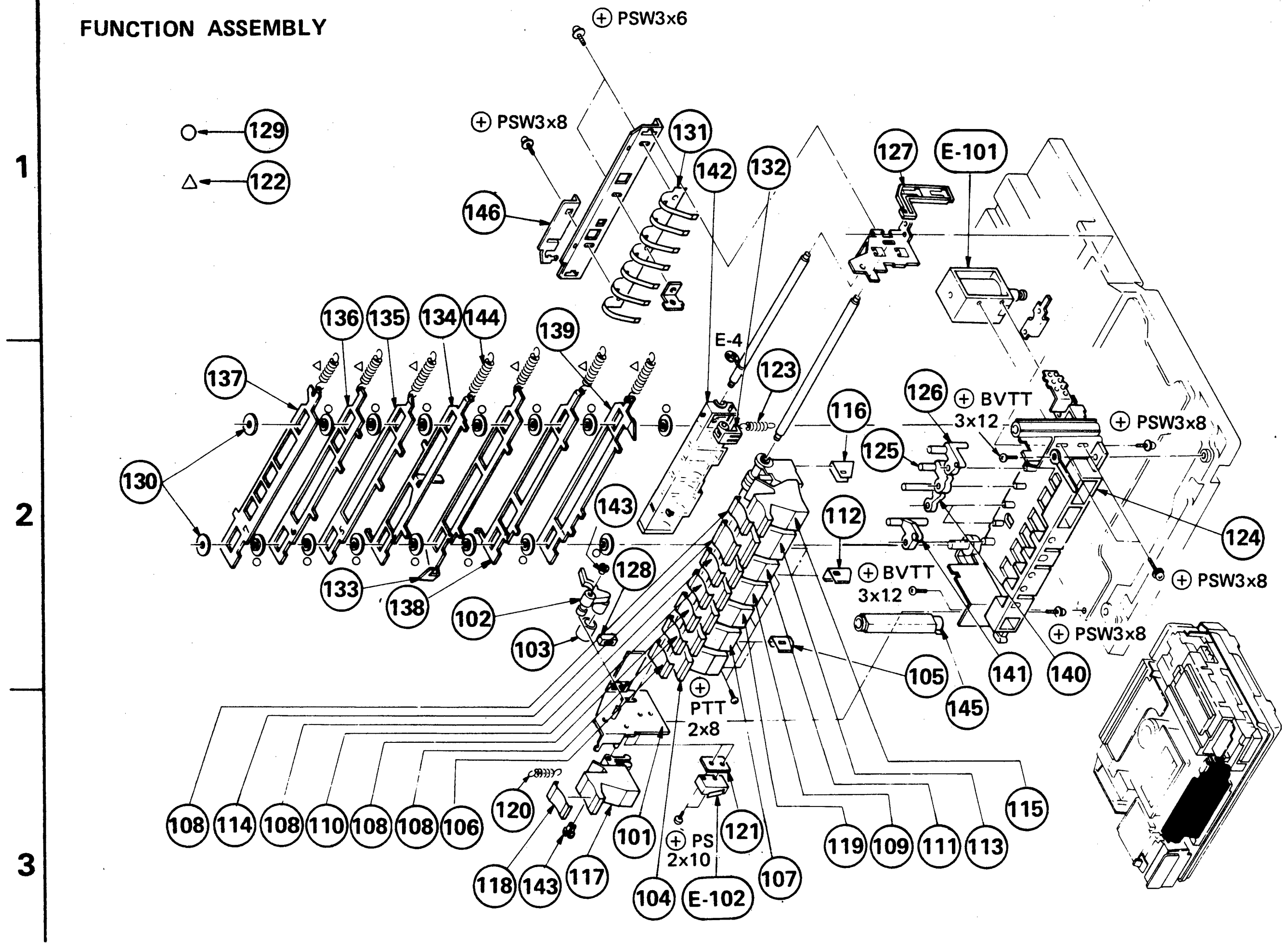
CASSETTE LIFT ASSEMBLY


A
B
C
D
1
2
3
4
65
TYPE CS-3
62
SPEED SEARCH
64
63
51
⊕ PSW3x6
58
53
E-2.3
⊕ BVTT
3x6
66
E-2.3
56
58
⊕ PSW3x8
E-1.5
54
E-2.3
55
⊖ PSW
3x6
E-4
E-3
⊕ PSW3x8
52
E-3
57
E-3
E-3
60
E-4
⊖ PSW3x6
⊕ PSW3x8
⊕ PSW
3x8
59
⊖ PSW
3x6
61

No.	Part No.	Description	Remark
51	A-6751-061-A	CASSETTE-UP BLOCK ASS'Y –	52 – 58, 66
52	A-6751-079-A	DAMPER ASS'Y, rotary	
53	3-491-359-00	SPRING, tension	
54	3-659-498-00	CUSHION, cassette holder	
55	3-642-490-00	SPRING, tension	
56	3-659-579-00	LEVER, release, lid lock	
57	3-659-635-00	SPRING, tension	
58	3-659-636-00	SPRING, tension	

No.	Part No.	Description	Remark
59	3-659-531-00	SPRING	
60	3-659-583-00	PLATE, blind cassette	
61	3-661-681-21	GUIDE, cassette	
62	3-659-585-00	STRIP, ornamental, cassette	
63	X-3665-811-1	LID ASS'Y, cassette-up --------	64
64	3-665-827-01	STICKER, 5800	
65	X-3658-101-0	EMBLEM ASS'Y (P)	
66	3-701-439-01	WASHER	

FUNCTION ASSEMBLY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△ 122
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137
E-4
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3x12
⊕ PSW3x8
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124
128
⊕ BVTT
3x12
⊕ PSW3x8
⊕ PSW3x8
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103
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145
⊕ PTT
2x8
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114
108
110
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101
⊕ PS
2x10
121
119
109
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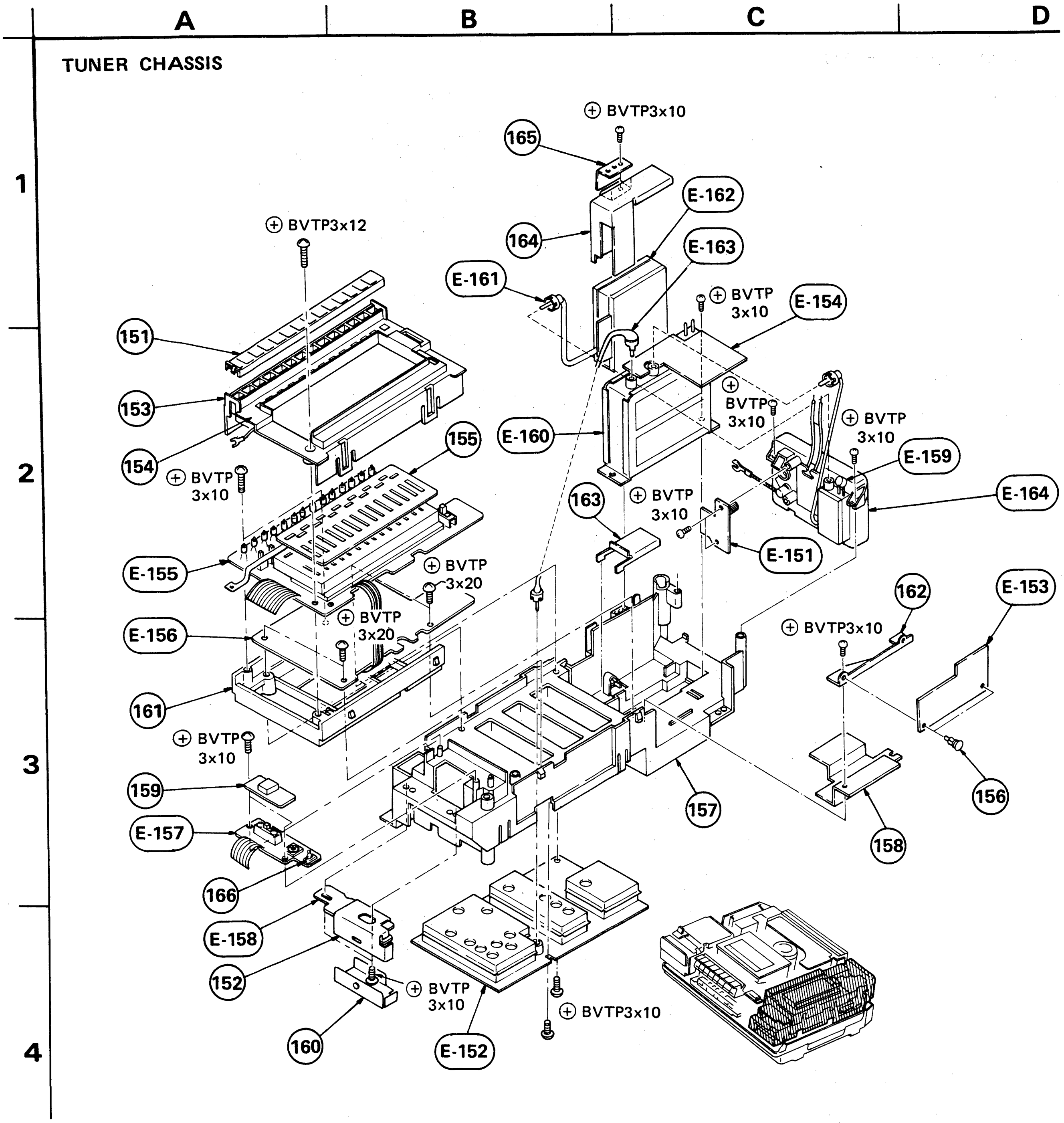
E-102
107

No.	Part No.	Description	Remark
101	♠X-3661-517-0	PLATE ASS'Y, side left	
102	♠X-3661-519-0	LEVER ASS'Y, release, lock plate –	103
103	♠3-661-588-00	SPACER	
104	X-3661-534-0	BUTTON ASS'Y, eject ----	105, 106
105	♠3-661-634-00	PROTECTOR (3)	
106	3-661-635-11	PLATE (1), ornamental	
107	X-3661-535-0	BUTTON ASS'Y, REW ----	105, 108
108	3-661-635-01	PLATE (1), ornamental	
109	X-3661-537-0	BUTTON ASS'Y, FWD --------	110
·110	3-661-635-21	PLATE (1), ornamental	
111	X-3661-538-0	BUTTON ASS'Y, FF ------	110, 112
112	♠3-661-633-00	PROTECTOR (2)	
113	X-3661-539-0	BUTTON ASS'Y, REC ----	112, 114
114	3-661-632-00	PLATE (2), ornamental	
115	X-3661-540-0	BUTTON ASS'Y, DUB ----	110, 116
116	♠3-661-585-00	PROTECTOR (1)	
117	X-3661-541-0	BUTTON ASS'Y, PAUSE ------	118
118	3-661-631-00	PLATE (3), ornamental	
119	X-3665-809-1	BUTTON ASS'Y, STOP -------	110
120	3-143-117-00	SPRING, tension	
121	3-534-263-00	INSULATOR	
122	3-536-006-XX	SPRING, tension	
123	3-630-622-00	SPRING	

No.	Part No.	Description	Remark
124	♠3-661-555-00	FRAME, lower	
125	3-661-578-02	LEVER, change, FF	
126	3-661-579-00	LEVER, change, REC	
127	♠3-661-581-00	PLATE, release	
128	♠3-661-584-00	RUBBER, silence	
129	3-661-610-00	SPACER (6-8), slide plate	
130	3-661-611-00	POLY-SLIDER (6-14)	
131	3-661-636-00	SPRING	
132	♠3-661-640-00	PLATE (2), lock	
133	♠3-661-661-02	PLATE, FF	
134	♠3-661-662-00	PLATE, FWD	
135	♠3-661-663-00	PLATE, EJECT	
136	♠3-661-664-02	PLATE, REC	
137	♠3-661-665-02	PLATE, MB	
138	♠3-661-666-02	PLATE, REW	
139	♠3-661-667-00	PLATE, DUB	
140	3-661-671-00	LEVER, release, FWD	
141	3-661-676-00	LEVER, release, EJECT/REW	
142	♠3-661-684-00	PLATE (1), lock	
143	3-703-074-00	CAP 3, shaft	
144	4-859-001-00	SPRING, tension	
145	3-661-575-00	SUPPORT	
146	♠3-665-847-00	HOOK, SPRING, SB	

TUNER CHASSIS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⊕ BVTP 3x20
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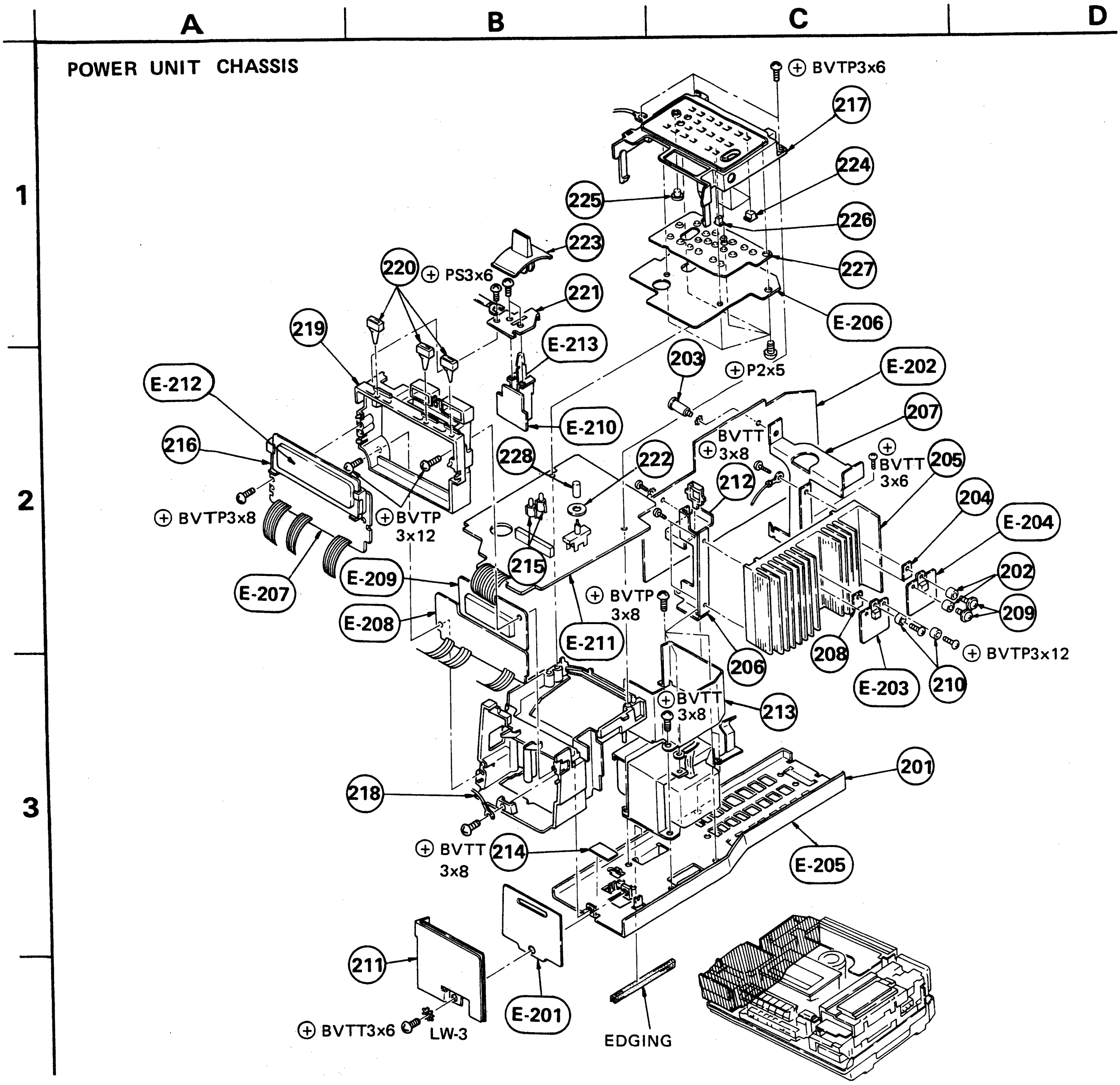
158
E-157
166
E-158
152
⊕ BVTP 3x10
160
E-152
⊕ BVTP3x10

No.	*Part No.*	*Description*	*Remark*
151	3-661-647-04	HOLDER, indicator	
152	♠3-661-723-00	CASE, shield (main)	
153	X-3661-579-0	COVER ASS'Y, tuner (W) --- 154	
154	♠X-3661-590-0	LABEL ASS'Y, selection button	
155	X-3661-586-0	PLATE ASS'Y, ornamental, preset	
156	3-646-090-00	RIVET, nylon	
157	♠3-661-562-00	FRAME, tuner	
158	♠3-661-618-00	PLATE, shield	
159	3-661-619-00	KNOB, slide	
160	♠3-661-724-00	LID, shilde case	
161	♠3-661-753-00	FRAME (M), tuner	
162	♠3-665-807-00	HOLDER, PC board, TU	
163	♠3-665-808-00	DECK, RF-M	
164	♠3-665-812-00	PLATE, slield, RF-M	
165	3-665-834-00	COVER, modulator	
166	3-659-792-00	HOLDE (D), LED	

POWER UNIT CHASSIS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E-213
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E-202
E-212
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E-210
BVTT
⊕3x8
⊕
BVTT
3x6
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222
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3x8
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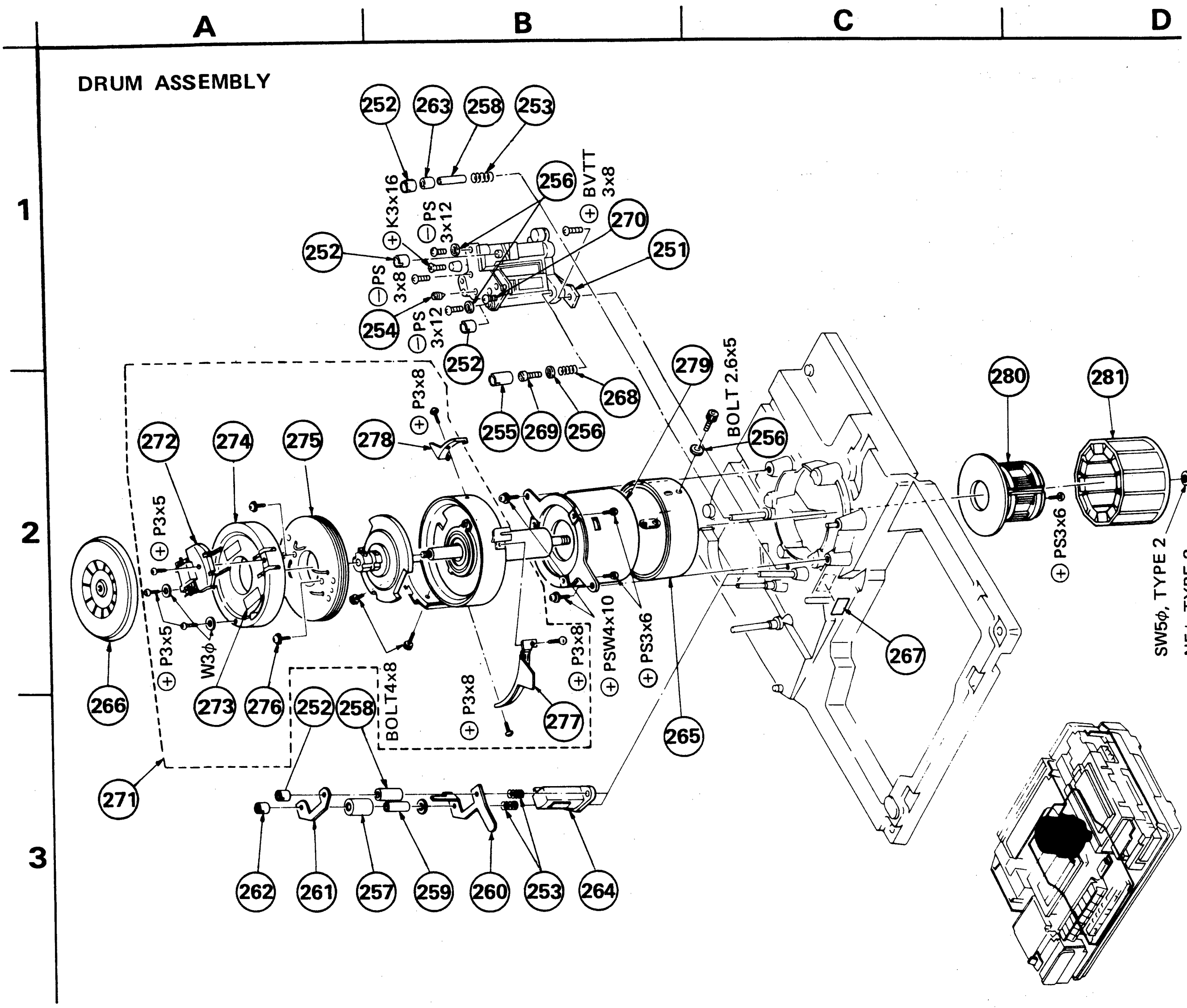
E-208
E-211
206
208
⊕ BVTP3x12
E-203
210
⊕BVTT
3x8
213
201
218
⊕ BVTT
3x8
214
E-205
211
⊕ BVTT3x6
LW-3
E-201
EDGING

No.	*Part No.*	*Description*	*Remark*
201	♠3-659-672-00	CHASSIS, power unit	
202	2-832-007-00	BUSHING (K), insulating	
203	3-659-743-00	SCREW, step	
204	3-660-978-00	SHEET, heat resisting	
205	♠3-664-413-00	HEAT SINK	
206	♠3-665-805-02	BRACKET (B), heat sink	
207	♠3-665-811-02	BRACKET (A), heat sink	
208	3-701-754-00	PLATE, insulating	
209	4-309-405-00	TAPPING, screw	
210	4-857-425-00	BUSHING, 03P insulating	
211	♠X-3661-582-0	PLATE ASS'Y, shield, AC	
212	♠3-665-806-00	PLATE, shield, heat	
213	♠3-659-670-00	PLATE, shield, transformer	
214	3-703-044-26	LABEL, caution	
215	♠3-661-576-00	HOLDER, LED	
216	♠3-661-677-00	HOLDER (W), indication tube	
217	X-3661-580-0	PANEL ASS'Y, timer control	
218	♠3-659-674-00	FRAME, rear timer	
219	♠3-661-559-00	FRAME (W), front timer	
220	♠3-661-615-00	HOLDER, interception	
221	♠3-661-623-00	BRACKET (W), power switch	
222	3-661-624-00	SHEET (W), blind	
223	3-661-645-00	KNOB, power switch	
224	3-661-725-11	KEY TOP (A)	
225	3-661-766-00	KEY TOP (B)	
226	3-661-768-00	KEY TOP (E)	
227	3-661-771-00	KEY, rubber	
228	3-659-521-01	KNOB, switch, lever slide	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252
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BOLT 2.6x5
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⊕P3x8
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255
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⊕P3x5
⊕PS3x6
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N5φ, TYPE 2
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W3φ
BOLT4x8
⊕P3x8
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⊕PSW4x10
⊕PS3x6
267
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273
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252
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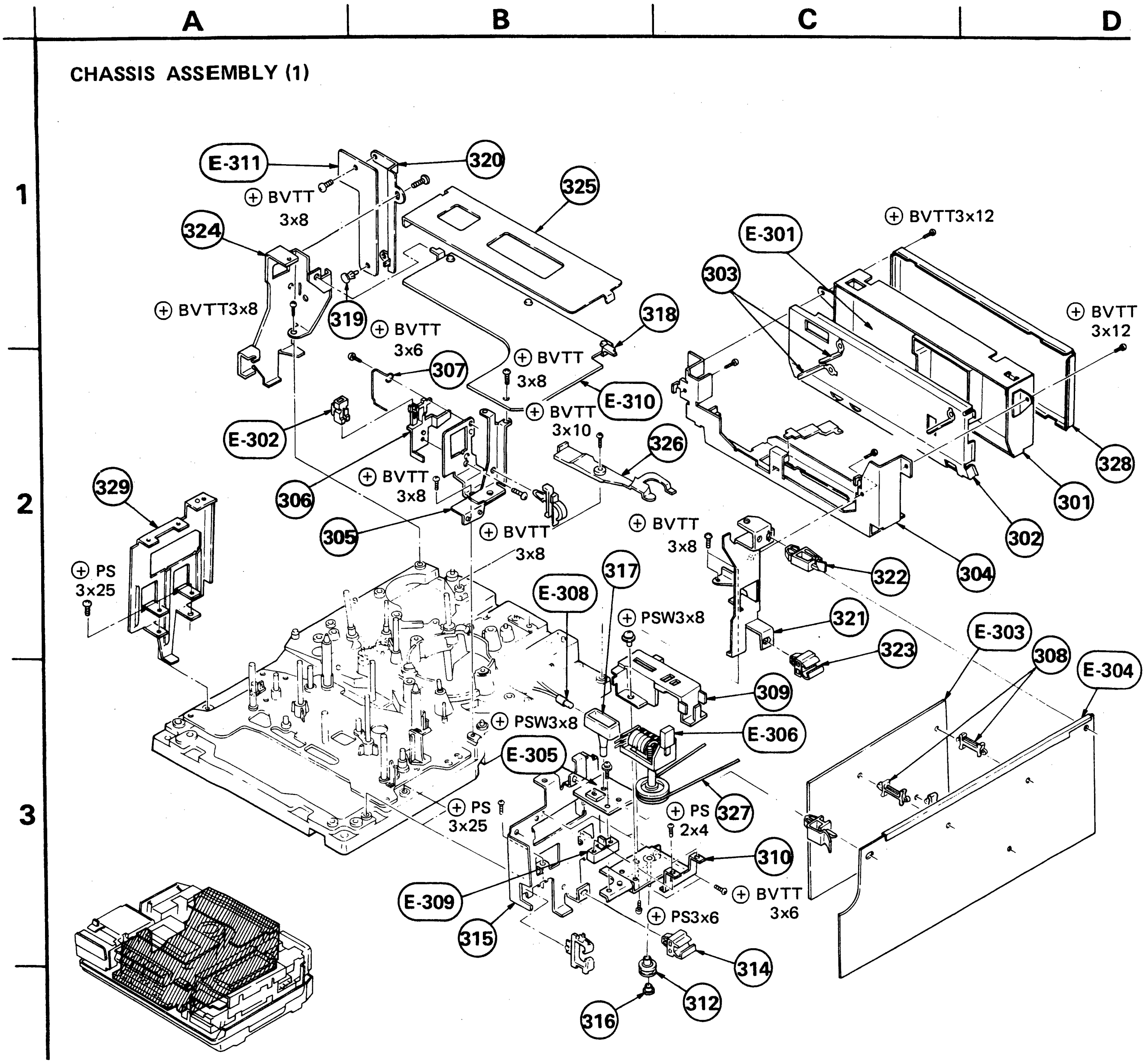
264

No.	Part No.	Description	Remark
251	A-6761-034-A	A.C.E ASS'Y	
252	3-645-562-00	NUT	
253	3-659-324-00	SPRING, compression	
254	3-659-332-00	SCREW	
255	3-659-752-00	NUT, A.C.E lock	
256	▲3-845-490-00	WASHER	
257	X-3659-304-0	ROLLER ASS'Y, guide, No. 1	
258	3-659-342-00	SLEEVE, guide, No. 2	
259	3-659-341-00	SLEEVE, guide, No. 1	
260	▲3-659-343-00	BRACKET, tape, entrance	
261	3-659-344-00	PLATE, guide, entrance	
262	3-659-345-00	NUT, guide, No. 1	
263	3-659-716-00	FLANGE, guide	
264	8-825-687-30	HEAD, full erase EF182-21	
265	▲X-3659-376-0	SHIELD ASS'Y, drum	
266	3-658-122-00	FAN	
267	3-660-902-00	LABEL, ID	
268	3-659-750-00	SPRING, compression	
269	3-659-751-00	SCREW, A.C.E, adjustment	
270	3-645-513-00	SPRING, head deck adjustment	
271	A-6050-086-A	DRUM ASS'Y	
272	A-6761-013-B	SPRING ASS'Y, tape retainer	
273	3-663-601-21	LABEL	
274	A-6760-042-A	DRUM SUB ASS'Y, upper	
275	A-6762-052-A	VIDEO HEAD DISK ASS'Y	
276	3-652-751-00	SCREW, + P 3x8	
277	3-652-741-00	BRACKET (A), tape	
278	3-652-728-00	BRACKET (B), tape	
279	X-3652-713-0	CASE ASS'Y, shield	
280	X-2619-403-0	STATOR ASS'Y	
281	X-2619-402-0	ROTOR ASS'Y	

CHASSIS ASSEMBLY (1)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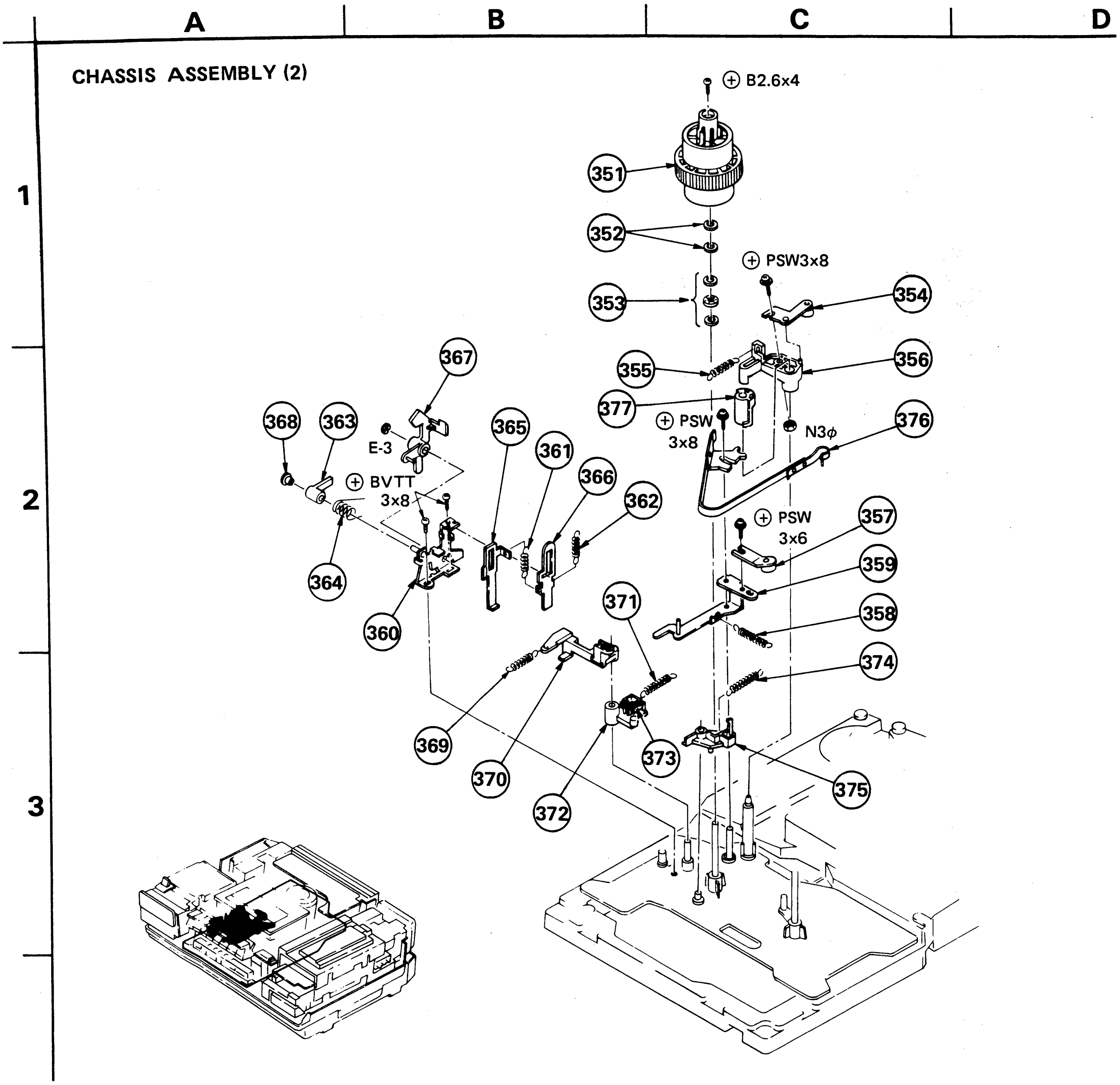
327
310
⊕ BVTT 3x6
⊕ PS3x6
E-309
315
314
312
316
E-303
308
E-304

No.	Part No.	Description	Remark
301	♦X-3659-339-0	CASE (A) MAIN ASS'Y, shield	
302	♦3-659-661-00	LID, upper, shield case (A)	
303	♦4-857-472-00	CLAMP	
304	♦X-3661-510-3	HOLDER ASS'Y, shield case	
305	♦X-3661-567-0	OPENER ASS'Y, lid	
306	♦3-659-548-00	HOLDER, T sensor	
307	3-659-762-02	ARM, ejector static	
308	♦3-661-764-00	HOLDER, PCB	
309	X-3665-819-0	COVER ASS'Y, counter	
310	♦X-3661-513-0	BRACKET ASS'Y, counter	
312	3-659-484-00	PULLEY, midway counter	
314	♦3-659-682-00	HOLDER, PC board	
315	♦3-661-670-00	BRACKET (1), cassette right	
316	3-703-075-00	CAP 2, shaft	
317	♦3-661-615-00	HOLDER, interception	
318	♦3-661-747-00	HOLDER, ID-2	
319	3-646-090-00	RIVET, nylon	
320	3-661-703-02	HOLDER, DS-3 board	
321	♦3-661-755-00	LEG, rear (right)	
322	♦3-659-681-00	HOLDER, PC board	
323	♦3-659-682-00	HOLDER, PC board	
324	♦3-661-756-00	LEG, rear (left)	
325	♦3-663-009-00	SPACER, ID-2	
326	♦3-659-303-00	RETAINER (SMALL), harness	
327	3-661-565-00	BELT, counter	
328	♦3-659-549-00	LID, bottom, shield case (A)	
329	♦3-661-646-00	BRACKET, cassette-up (left)	

CHASSIS ASSEMBLY (2)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E-3
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366
⊕ BVTT 3x8
362
⊕ PSW 3x6
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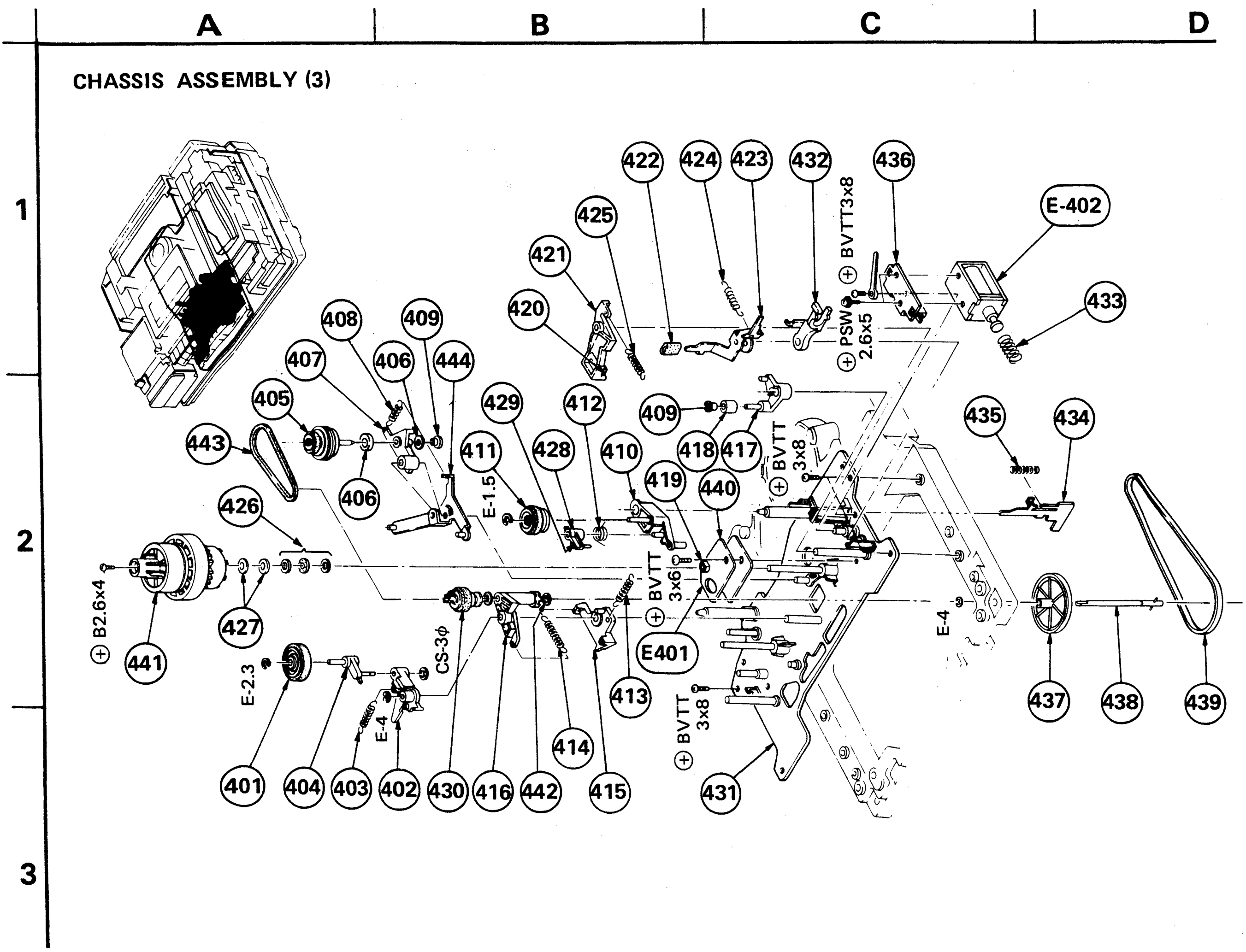
No.	Part No.	Description	Remark
351	X-3659-315-3	REEL ASS'Y, S	
352	3-646-184-00	SPACER 0.2mm	
	3-646-184-11	SPACER 0.1mm	
353	3-646-185-00	BEARING	
354	X-3659-326-0	ARM ASS'Y, cassette compartment	
355	3-537-205-00	SPRING, tension	
356	♦3-659-562-00	ARM (1), cassette compartment	
357	X-3659-323-0	PLATE ASS'Y, adjustment, R	
358	3-143-060-00	SPRING, tension	
359	♦X-3659-322-0	ARM ASS'Y, ring	
360	♦X-3659-317-0	BRACKET ASS'Y, lock	
361	3-492-150-00	SPRING, tension	
362	3-532-725-00	SPRING, tension	
363	♦3-659-454-00	ARM, ring lock	
364	3-659-455-00	SPRING	
365	♦3-659-457-00	PLATE, slide, MS	
366	♦3-659-458-00	DETECTION, cassette	
367	3-659-624-00	LOCK, cassette compartment	
368	3-703-074-00	CAP 3, shaft	
369	3-648-626-00	SPRING, tension	
370	♦3-659-567-00	BRAKE, soft	
371	3-534-217-00	SPRING, tension	
372	♦3-659-445-00	BRAKE, S	
373	3-659-446-00	LINING, brake	
374	3-536-006-02	SPRING, tension	
375	3-661-564-00	LEVER, press, REW	
376	X-3659-328-2	BAND ASS'Y, tension regulator	
377	3-660-916-00	STOPPER, END	

CHASSIS ASSEMBLY (3)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E-4
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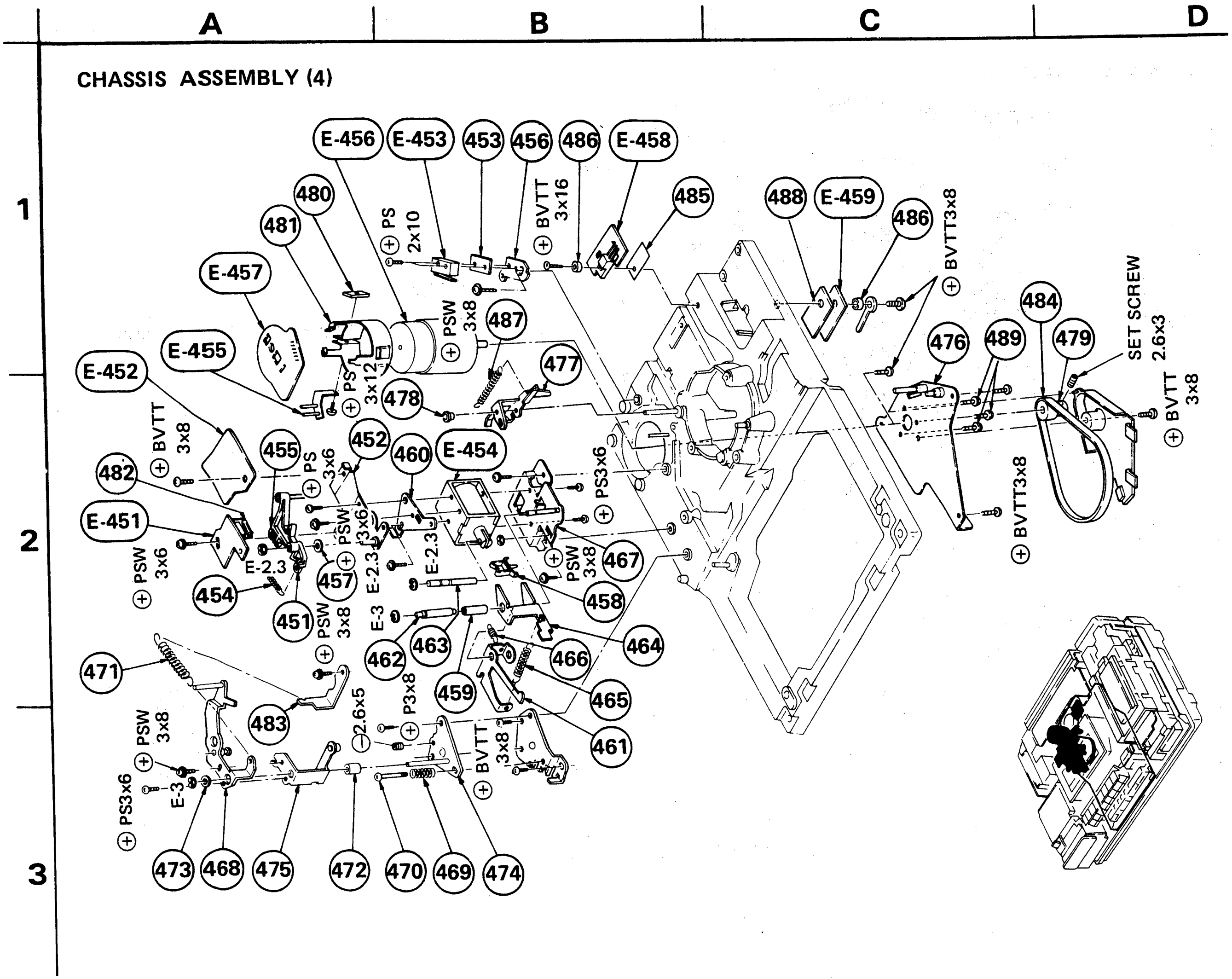
No.	Part No.	Description	Remark
401	X-3653-315-0	IDLER ASS'Y	
402	♦X-3659-318-0	BRACKET ASS'Y, adjustment	
403	3-642-483-00	SPRING, tension	
404	♦3-659-416-00	LEVER, REW	
405	X-3653-310-0	LIMITER ASS'Y, forward	
406	3-701-437-21	WASHER	
407	X-3659-410-0	ARM ASS'Y, FWD	
408	3-642-483-00	SPRING, tension	
409	3-703-075-00	CAP 2, shaft	
410	♦X-3659-325-0	ARM ASS'Y, E idler	
411	X-3664-319-0	IDLER ASS'Y, E	
412	3-659-432-00	SPRING	
413	3-642-483-00	SPRING, tension	
414	3-645-168-00	SPRING, tension	
415	♦3-659-564-00	LEVER, FF press	
416	X-3659-309-3	ARM ASS'Y, FF	
417	♦X-3659-311-0	ARM ASS'Y, TB	
418	3-659-464-00	ROLLER, TB arm	
419	3-665-825-01	HOLDER, photo	
420	3-659-446-00	LINING, brake	
421	♦3-659-791-02	BRAKE, T	
422	3-538-051-11	RUBBER, brake	
423	♦3-660-983-00	BRAKE, P	
424	3-660-984-00	SPRING, tension	
425	3-534-217-00	SPRING, tension	
426	3-646-185-00	BEARING	
427	3-646-184-00	SPACER	
428	♦3-659-431-00	CLAW, ratchet	
429	3-553-038-00	SPACER, EBF	
430	X-3661-520-0	PULLEY ASS'Y, midway	
431	♦X-3659-347-0	CHASSIS ASS'Y, mechanism	
432	♦3-660-982-00	ARM, PB press	
433	3-660-985-00	SPRING, compression	
434	♦3-659-456-00	PLATE, erasing protection	
435	3-646-312-00	SPRING	
436	♦3-659-470-00	BASE, PB, solenoid	
437	3-664-372-00	PULLEY, mechanism	
438	X-3664-302-0	SHAFT ASS'Y, pulley, mechanism	
439	3-664-306-00	BELT, relay	
440	♦3-665-826-00	SHEET, insulating RL	
441	X-3665-816-0	TABLE ASS'Y, reel, T	
442	3-701-439-21	WASHER	
443	3-653-324-00	BELT, FWD	
444	X-3659-319-0	LEVER ASS'Y, FWD	

CHASSIS ASSEMBLY (4)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SET SCREW 2.6x3
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461
⊕ PS3x6
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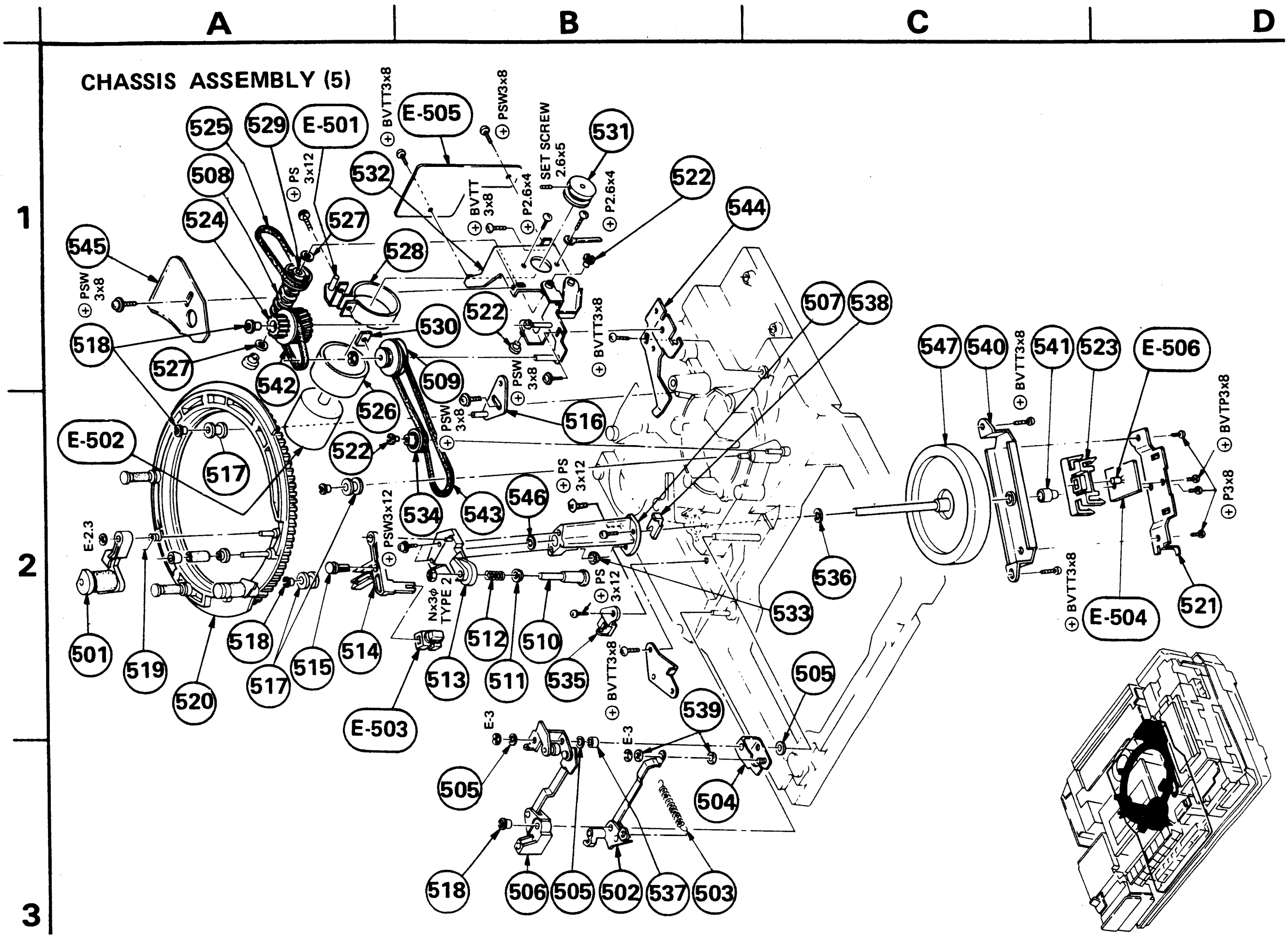
469
474

No.	Part No.	Description	Remark
451	X-3659-310-0	ARM ASS'Y, detection, slack	
452	●X-3659-380-0	BASE ASS'Y	
453	3-534-263-00	INSULATOR	
454	3-542-476-00	SPRING, tension	
455	3-646-571-00	MAGNET	
456	●3-659-360-00	BRACKET, threading end MS	
457	3-701-439-11	WASHER	
458	●3-644-407-00	CLIP, AC, wire	
459	●3-658-194-00	SPACER (4-25)	
460	●3-659-775-00	PLATE, adjustment, lever shaft	
461	●3-659-777-00	LEVER (B), pinch press	
462	●3-659-778-00	SHAFT, pinch press lever	
463	●3-659-780-00	PIN, lever, pinch press	
464	●3-659-781-00	LEVER (A), pinch press	
465	3-659-784-00	SPRING, tension	
466	3-659-785-00	SPRING, tension	
467	●3-659-789-00	BASE, pinch plunger	
468	●X-3659-370-2	PLATE ASS'Y, arm	
469	3-652-413-00	SPRING, compression	
470	●3-437-173-02	SCREW, head adjusting	
471	3-659-378-02	SPRING, tension	
472	3-659-757-00	SPACER	
473	3-659-758-00	WASHER	
474	●X-3659-305-0	PLATE ASS'Y, adjustment	
475	●X-3659-369-0	ARM ASS'Y, tension regulator	
476	●X-3664-303-0	BRACKET ASS'Y, motor, capstan	
477	●3-659-557-05	ARM, lock, keep	
478	3-703-074-00	CAP 3, shaft	
479	3-664-311-00	PULLEY, motor	
480	●3-664-338-00	PLATE, nut, M3	
481	●3-664-422-00	HOLDER, NF-1	
482	●3-659-359-00	PLATE, boost, reed switch	
483	●3-659-319-00	PLATE, adjustment, BT	
484	3-664-310-00	BELT, capstan	
485	3-701-754-00	PLATE, insulating	
486	4-857-425-00	BUSHING, 03P insulating	
487	3-530-255-01	SPRING, tension	
488	3-701-754-00	PLATE, insulating	
489	3-701-468-00	SCREW, + PS2x4	

CHASSIS ASSEMBLY (5)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BVTT3x8
E-505
PSW3x8
SET SCREW 2.6x5
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PS 3x12
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BVTT 3x8
P2.6x4
P2.6x4
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PSW 3x8
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BVTT3x8
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BVTT3x8
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E-506
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PSW 3x8
BVTP3x8
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PSW 3x8
E-502
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PS 3x12
P3x8
E-2.3
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PSW3x12
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PS 3x12
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Nx3Φ TYPE 2
BVTT3x8
E-504
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BVTT3x8
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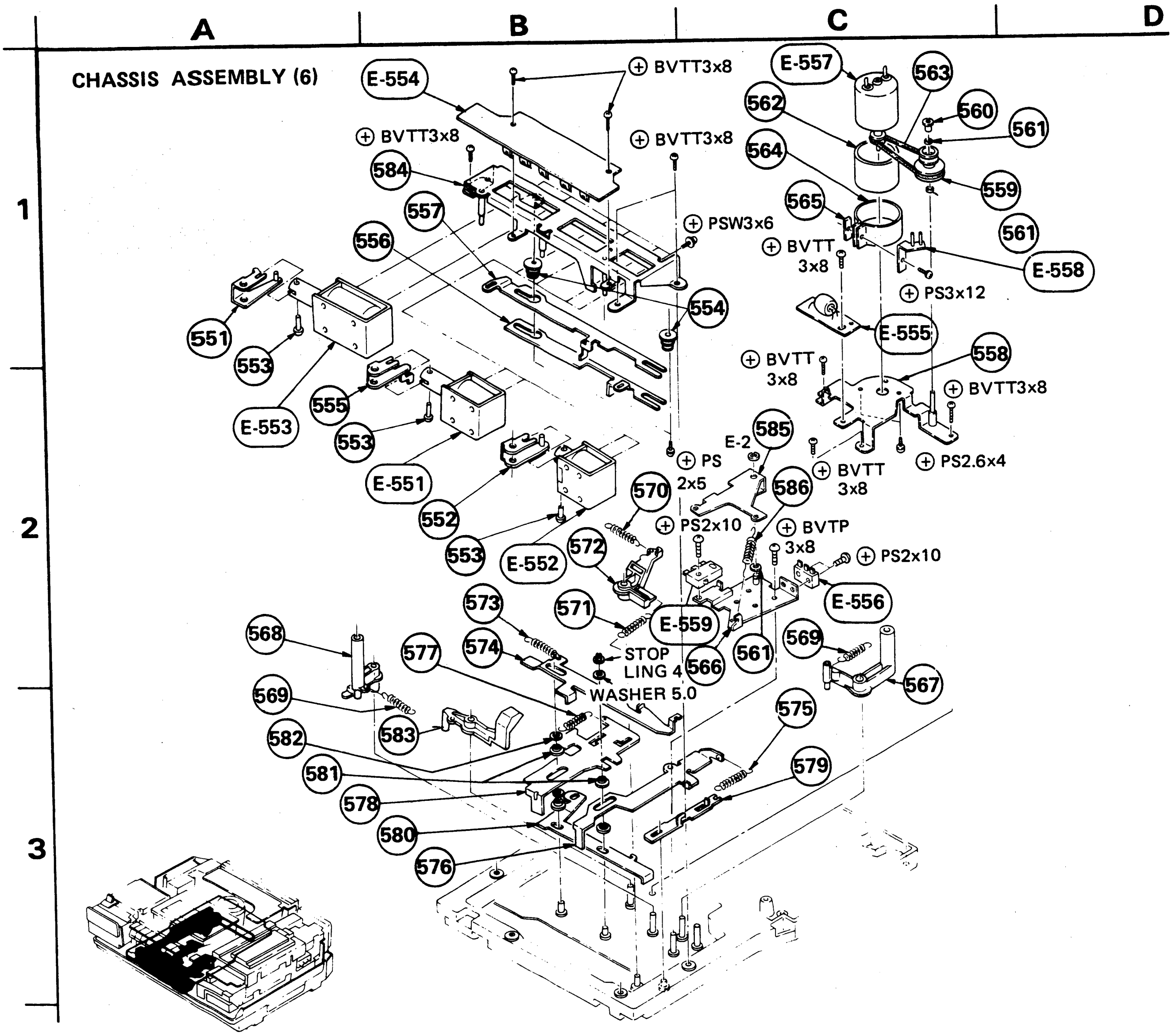
No.	Part No.	Description	Remark
501	X-3659-337-0	ARM ASS'Y, pinch roller	
502	X-3659-335-5	LINK ASS'Y (1), release	
503	3-660-911-00	SPRING, tension	
504	X-3659-386-3	LINK ASS'Y (2), release	
505	3-701-441-21	WASHER	
506	X-3659-333-0	STOPPER ASS'Y, tension regulator	
507	X-3659-334-0	HOUSING ASS'Y, capstan	
508	X-3664-318-0	GEAR ASS'Y, worm	
509	X-3664-317-2	LIMITER ASS'Y, E	
510	X-3659-308-2	GUIDE ASS'Y, No. 0	
511	3-659-337-00	FLANGE, No. 0 guide upper	
512	3-659-338-00	SPRING, compression	
513	3-659-551-00	FRAME, guide, No. 0	
514	♦3-659-632-00	HOLDER, S sensor	
515	4-829-039-00	RIVET, nylon	
516	♦X-3659-307-0	SUPPORT ASS'Y, ring roller	
517	3-659-391-00	ROLLER, ring	
518	3-703-074-00	CAP 3, shaft	
519	3-659-388-00	SPRING	
520	A-6750-087-A	RING BLOCK ASS'Y, threading	
521	♦3-659-313-00	PLATE, adjustment, D.M.E.	
522	3-703-075-00	CAP 2, shaft	
523	3-658-161-00	HOLDER, D.M.E.	
524	3-664-323-00	GEAR, threading	

No.	Part No.	Description	Remark
525	3-664-327-03	BELT, LM	
526	♦3-664-333-00	PLATE, shield, motor	
527	3-701-437-11	WASHER	
528	♦3-664-337-00	HOLDER, motor	
529	3-664-358-00	SHAFT, gear, worm	
530	♦3-664-338-00	PLATE, nut, M3	
531	3-664-357-02	PULLEY, LM	
532	X-3664-322-2	DECK ASS'Y, loading	
533	3-646-182-00	CAP, oil	
534	3-659-302-00	PULLEY, idle	
535	♦3-659-320-00	HOOK, spring, release	
536	3-659-350-00	POLY-SLIDER (3.4, DIA.)	
537	3-659-365-00	SPACER (4-3)	
538	3-659-759-11	SPACER, capstan	
539	3-701-441-11	WASHER	
540	3-659-312-00	RETAINER, capstan	
541	3-659-314-00	RETAINER, thrust	
542	3-664-328-03	BELT, limiter, E	
543	3-664-329-00	BELT, Idler, E	
544	♦3-664-379-00	BRACKET, deck, threading	
545	♦3-664-450-00	PLATE, readjustment, pinch arm	
546	3-646-183-00	ABSORBER, capstan oil	
547	A-6735-035-A	CAPSTAN BLOCK ASS'Y	

CHASSIS ASSEMBLY (6)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⊕ BVTT3x8
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⊕ BVTT 3x8
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⊕ PS3x12
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⊕ BVTT3x8
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E-2
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⊕ BVTT 3x8
⊕ PS2.6x4
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⊕ PS2x10
⊕ BVTP 3x8
⊕ PS2x10
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STOP LING 4
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WASHER 5.0
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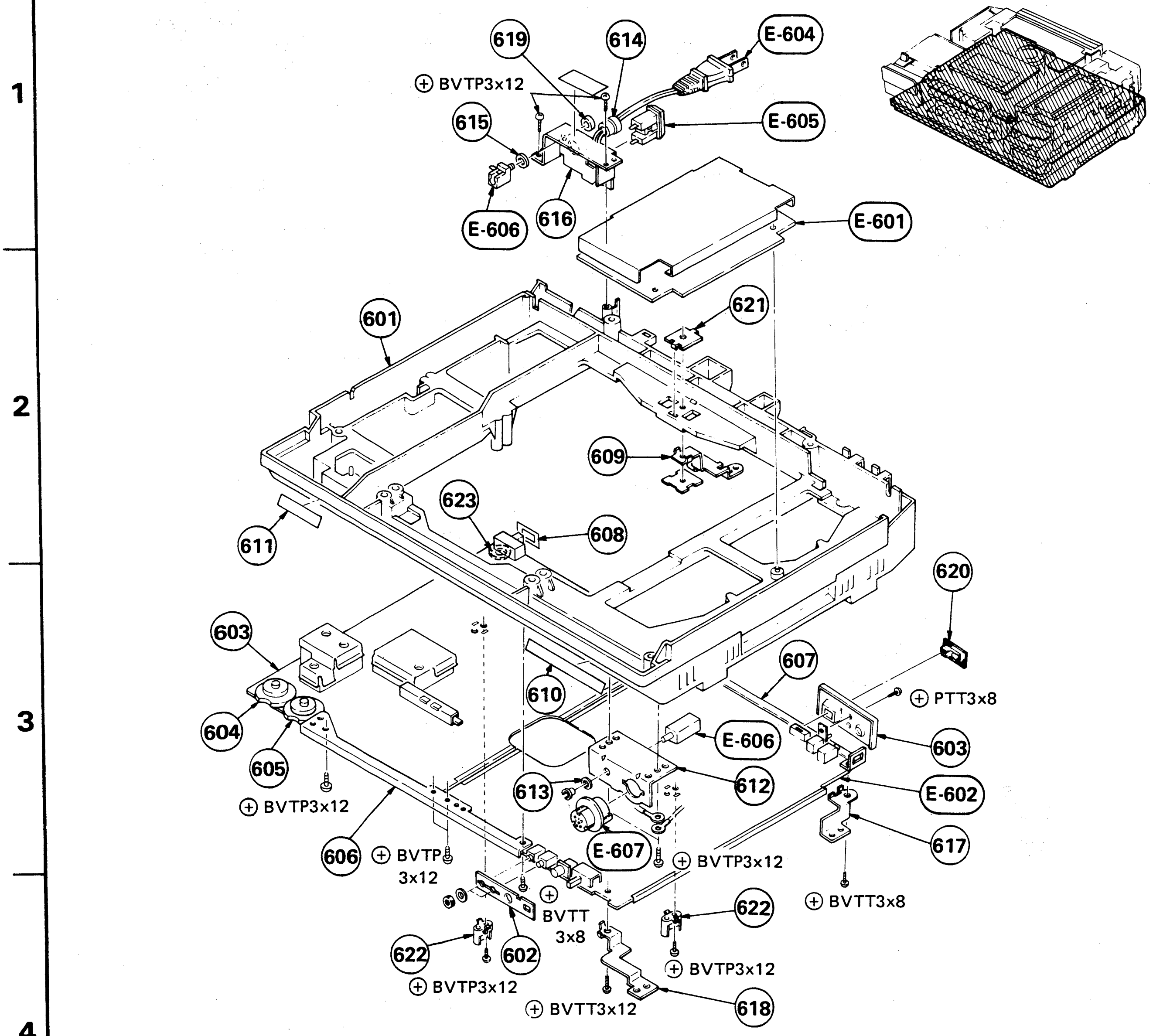
No.	Part No.	Description	Remark
551	♦X-3661-515-0	LEVER ASS'Y, F	
552	♦X-3661-516-0	LEVER ASS'Y, R	
553	3-659-481-00	PIN, solenoid	
554	3-661-601-00	GUIDE (1.6), 2 stap slide	
555	♦3-661-602-00	LEVER, FF	
556	♦3-661-672-00	PLATE, slide, R	
557	♦3-661-673-00	PLATE, slide, F	
558	♦X-3664-305-0	BRACKET ASS'Y, motor reel	
559	X-3664-301-0	PULLEY ASS'Y, relay	
560	3-703-074-00	CAP 3, shaft	
561	3-701-439-21	WASHER	
562	♦3-664-333-00	PLATE, shield, motor	
563	3-664-304-00	BELT, motor	
564	♦3-664-337-00	HOLDER, motor	
565	♦3-664-338-00	PLATE, nut, M3	
566	♦X-3665-815-0	BRACKET ASS'Y, C.SW	
567	♦3-661-597-00	LEVER (A), slide switch	
568	♦3-661-598-00	LEVER (R), slide switch	
569	3-661-712-00	SPRING, tension	
570	2-101-155-00	SPRING, tension	
571	3-532-125-00	SPRING, tension	
572	3-659-560-00	ARM, E	
573	3-535-411-00	SPRING, tension	
574	♦3-661-599-00	PLATE, slide, REC	
575	3-645-135-00	SPRING, tension	
576	♦3-661-608-00	PLATE, slide, FWD	
577	3-639-371-00	SPRING, tension	
578	♦3-663-033-00	PLATE, slide, DUB	
579	3-659-460-00	PLATE, release, lock	
580	♦3-663-029-00	JOINT	
581	3-646-271-00	BOSS	
582	3-701-444-01	WASHER, 6	
583	♦3-661-590-00	LEVER, release, slide switch	
584	♦X-3661-527-0	FRAME ASS'Y, solenoid	
585	♦3-665-832-00	LEVER, change	
586	3-665-830-00	SPRING, tension	

A	B	C	D

LOWER FRAME ASSEMBLY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⊕ PTT3x8
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⊕ BVTP3x12
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⊕ BVTP 3x12
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⊕ BVTP3x12
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⊕ BVTT 3x8
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⊕ BVTP3x12
⊕ BVTT3x12
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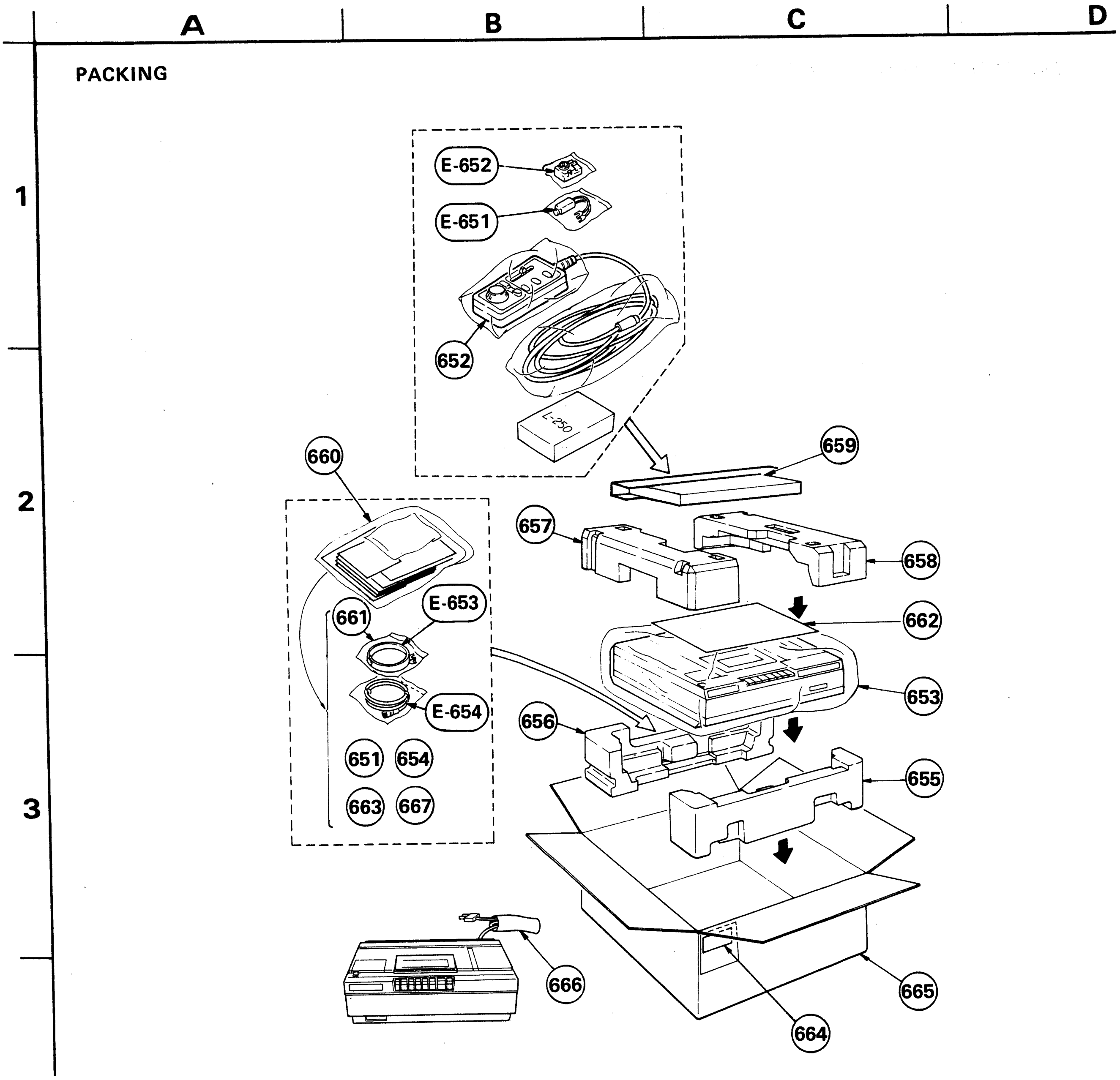
No.	Part No.	Description	Remark
601	X-3665-814-0	FRAME ASS'Y (W), lower --	609–611
602	3-661-620-00	COVER, input	
603	3-661-707-00	COVER, output	
604	3-664-332-00	KNOB, track control	
605	3-664-453-00	KNOB, slow track control	
606	♠3-665-809-00	REINFORCEMENT (A), PC board	
607	♠3-665-810-00	REINFORCEMENT (B), PC board	
608	3-663-701-00	CLOTH, mask, speed selection	
609	♠3-661-622-00	JOINT, ground	
610	3-661-628-00	LABEL, input	
611	3-665-839-00	LABEL (W), track control	
612	♠3-665-802-00	BRACKET, connector	
613	3-665-803-00	WASHER	
614	2-231-019-00	CLAMPER, cord	
615	3-661-733-00	COLLAR, power panel	
616	3-661-748-00	PANEL, power	
617	♠3-661-571-00	PLATE (A), ground, bottom plate	
618	♠3-661-572-00	PLATE (B), groung, bottom plate	
619	3-663-011-00	CAP, CC terminal	
620	3-659-720-00	STOPPER, slide switch	
621	♠3-659-529-00	SPACER, plate	
622	3-659-530-02	BLOCK, support, bottom plate	
623	4-309-378-00	SPACER	

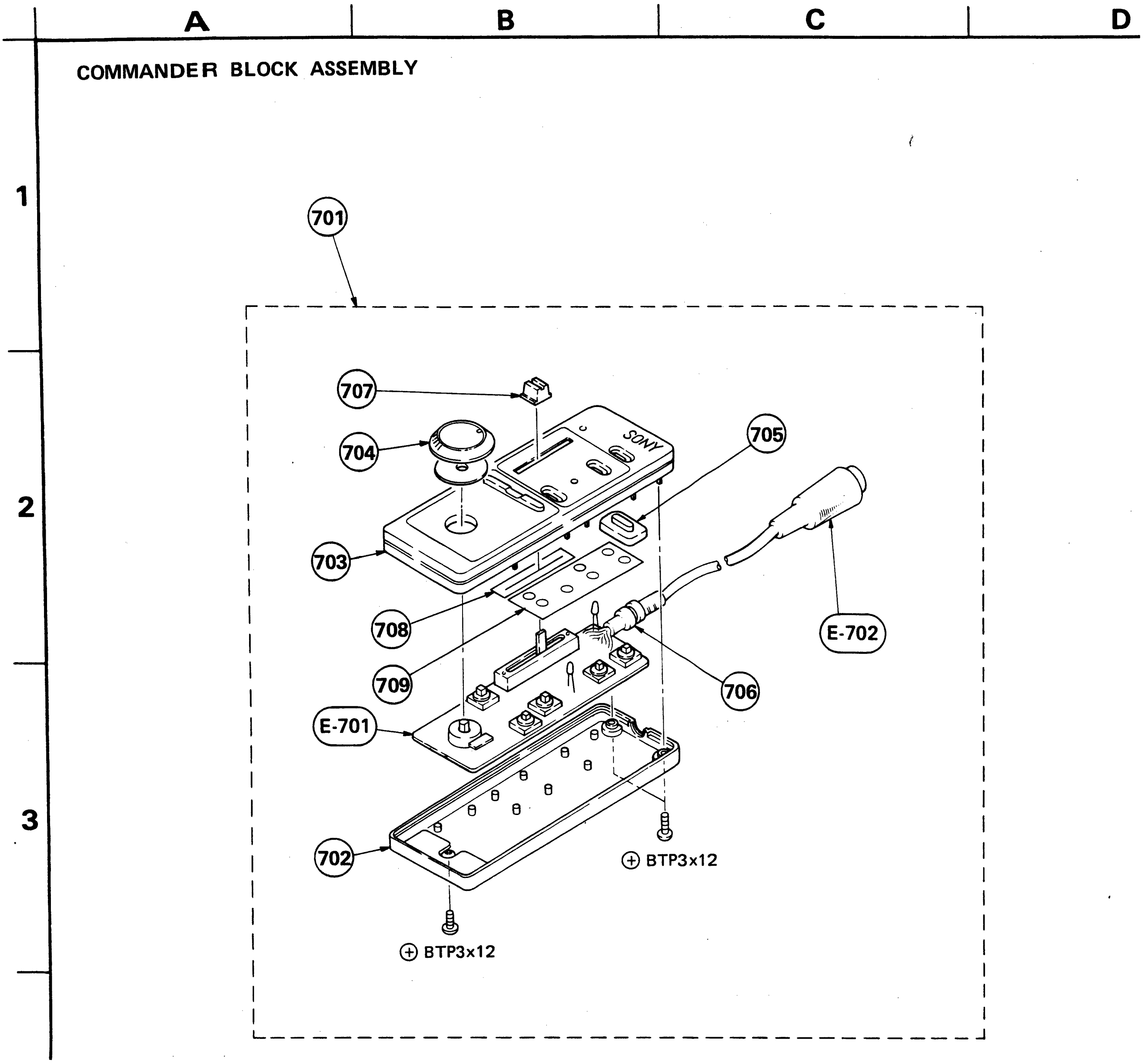
PACKING



No.	Part No.	Description	Remark
651	3-783-403-21	MANUAL, instruction	
	3-783-403-31	MANUAL, instruction (CND model only)	
652	A-6701-116-A	COMMANDER ASS'Y, remote	
653	3-656-390-00	BAG, protection	
654	3-661-648-00	INDICATOR (W), accessory	
655	3-663-046-00	CUSHION, (front lower)	
656	3-663-047-00	CUSHION, (rear lower)	
657	3-663-048-00	CUSHION, (left upper)	
658	3-663-049-00	CUSHION, (right upper)	
659	3-663-050-00	CASE, accessory	
660	3-701-630-00	BAG, polyethylene	
661	3-701-625-00	BAG, polyethylene	
662	3-793-962-21	CARD, caution (US model)	
	3-793-962-31	CARD, caution (CND model)	

No.	Part No.	Description	Remark
663	4-491-336-21	REGISTRATION (US model)	
	4-491-298-32	REGISTRATION (CND model)	
664	3-703-157-01	LABEL, destination	
665	X-3665-817-0	INDIVIDUAL CARTON ASS'Y	
666	3-660-986-00	SHEET, protection	
667	4-491-335-21	CARD, warranty (US model)	
	4-491-335-33	CARD, warranty (CND model)	
E-651	1-417-063-00	TRANSFORMER, antenna (EAC-24)	
E-652	1-513-379-00	CONVERTER (EAC-25)	
E-653	1-551-139-00	CORD, connection	
E-654	1-551-644-41	CORD, connection	

COMMANDER BLOCK ASSEMBLY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⊕ BTP3x12
SONY

No.	*Part No.*	*Description*	*Remark*
701	A-6701-116-A	COMMANDER ASS'Y, remote	
702	X-3665-804-0	CASE ASS'Y, commander	
703	X-3665-812-0	CASE ASS'Y, commander (upper)	
704	X-3665-803-0	KNOB ASS'Y, VCR	
705	3-659-728-11	PAUSE, key top	
706	3-664-401-00	BUSHING, cord	
707	3-665-816-00	KNOB, slow	
708	3-665-818-00	CLOTH, mask commander	
709	3-665-846-00	CUSHION, commander	
E-701	●1-603-567-00	PC BOARD, RC-11	
E-702	1-555-454-00	CORD, with plug 13P	

SECTION 4
ELECTRICAL PART LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : μH

Ref.No	Part No	Description				Remark
	♠:A-6711-254-A	CR-9 BOARD, COMPLETE				E-601

CAPACITOR

Ref.No	Part No	Description				Remark
C401	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C402	1-161-021-00	CERAMIC	0.047MF	10%	25V	
C403	1-123-306-00	ELECT	47MF	20%	10V	
C404	1-102-978-00	CERAMIC	220PF	5%	50V	
C405	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C406	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C407	1-123-319-00	ELECT	47MF	20%	16V	
C409	1-123-307-00	ELECT	100MF	20%	10V	
C410	1-123-307-00	ELECT	100MF	20%	10V	
C411	1-123-320-00	ELECT	100MF	20%	16V	
C412	1-161-021-00	CERAMIC	0.047MF	10%	25V	
C413	1-161-017-00	CERAMIC	0.022MF	10%	25V	
C414	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C415	1-123-308-00	ELECT	220MF	20%	10V	
C416	1-161-017-00	CERAMIC	0.022MF	10%	25V	
C417	1-102-962-00	CERAMIC	30PF	5%	50V	
C418	1-102-962-00	CERAMIC	30PF	5%	50V	
C419	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C420	1-161-017-00	CERAMIC	0.022MF	10%	25V	
C421	1-161-017-00	CERAMIC	0.022MF	10%	25V	
C422	1-161-017-00	CERAMIC	0.022MF	10%	25V	
C423	1-102-959-00	CERAMIC	22PF	5%	50V	
C424	1-161-021-00	CERAMIC	0.047MF	10%	25V	
C425	1-123-306-00	ELECT	47MF	20%	10V	
C426	1-102-963-00	CERAMIC	33PF	5%	50V	
C427	1-102-963-00	CERAMIC	33PF	5%	50V	
C428	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C429	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C430	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C431	1-123-306-00	ELECT	47MF	20%	10V	
C432	1-161-021-00	CERAMIC	0.047MF	10%	25V	
C433	1-161-017-00	CERAMIC	0.022MF	10%	25V	
C434	1-161-021-00	CERAMIC	0.047MF	10%	25V	
C435	1-161-017-00	CERAMIC	0.022MF	10%	25V	
C438	1-123-320-00	ELECT	100MF	20%	16V	
C439	1-123-320-00	ELECT	100MF	20%	16V	
C440	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C441	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C442	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C444	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C449	1-123-352-00	ELECT	1MF	20%	50V	
C450	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C453	1-130-022-00	FILM	0.0022MF	5%	50V	
C454	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C455	1-130-224-00	FILM	0.015MF	5%	50V	
C456	1-123-320-00	ELECT	100MF	20%	16V	
C457	1-123-318-00	ELECT	33MF	20%	16V	
C458	1-123-319-00	ELECT	47MF	20%	16V	
C460	1-123-316-00	ELECT	10MF	20%	16V	

Ref.No	Part No	Description				Remark
C461	1-123-320-00	ELECT	100MF	20%	16V	
C462	1-123-307-00	ELECT	100MF	20%	10V	

COMPOSITION

CP401	1-231-618-00	COMPOSITION CIRCUIT 100KX3
CP403	1-231-839-00	COMPOSITION CIRCUIT BLOCK
CP404	1-231-840-00	COMPOSITION CIRCUIT BLOCK
CP405	1-231-841-00	COMPOSITION CIRCUIT BLOCK

DIODE

D401	8-719-815-55	DIODE 1S1555
D402	8-719-815-55	DIODE 1S1555
D403	8-719-815-55	DIODE 1S1555
D404	8-719-815-55	DIODE 1S1555
D405	8-719-815-55	DIODE 1S1555
D406	8-719-815-55	DIODE 1S1555
D407	8-719-815-55	DIODE 1S1555
D408	8-719-815-55	DIODE 1S1555
D409	8-719-815-55	DIODE 1S1555
D410	8-719-815-55	DIODE 1S1555
D411	8-719-815-55	DIODE 1S1555
D412	8-719-815-55	DIODE 1S1555
D413	8-719-815-55	DIODE 1S1555
D416	8-719-815-55	DIODE 1S1555
D417	8-719-815-55	DIODE 1S1555
D420	8-719-815-55	DIODE 1S1555

DELAY LINE

DL401	1-415-215-00	DELAY LINE (0.5H)
DL402	1-415-216-00	DELAY LINE, 1/4H

IC

IC401	8-751-360-00	IC CX-136A
IC402	8-751-360-00	IC CX-136A
IC403	8-751-300-00	IC CX-130
IC404	8-743-600-00	IC BX-360
IC405	8-743-610-00	IC BX-361
IC406	8-759-240-11	IC TC4011BP
IC407	8-759-618-48	IC M51848L

COIL

L401	1-407-167-XX	MICRO INDUCTOR 68UH
L402	1-407-167-XX	MICRO INDUCTOR 68UH
L403	1-407-686-00	MICRO INDUCTOR 2.7UH
L404	1-407-183-XX	MICRO INDUCTOR 2.7UH
L405	1-407-685-00	MICRO INDUCTOR 2.2UH
L406	1-407-685-00	MICRO INDUCTOR 2.2UH

VARIABLE COIL

LV401	1-407-569-00	COIL,VARIABLE 10.0MH
LV402	1-407-569-00	COIL,VARIABLE 10.0MH

Ref.No	Part No	Description				Remark
		TRANSISTOR				
Q401	8-729-245-83	TRANSISTOR 2SC2458				
Q402	8-729-245-83	TRANSISTOR 2SC2458				
Q403	8-729-245-83	TRANSISTOR 2SC2458				
Q404	8-729-245-83	TRANSISTOR 2SC2458				
Q405	8-729-245-83	TRANSISTOR 2SC2458				
Q406	=>8-729-117-54	TRANSISTOR 2SA1175				
Q407	=>8-729-117-54	TRANSISTOR 2SA1175				
Q408	8-729-245-83	TRANSISTOR 2SC2458				
Q409	=>8-729-117-54	TRANSISTOR 2SA1175				
Q410	=>8-729-117-54	TRANSISTOR 2SA1175				
Q411	=>8-729-117-54	TRANSISTOR 2SA1175				
Q412	=>8-729-117-54	TRANSISTOR 2SA1175				
Q413	=>8-729-117-54	TRANSISTOR 2SA1175				
Q414	8-729-178-54	TRANSISTOR 2SC2785				
Q417	=>8-729-902-11	TRANSISTOR 2SC2021				
Q418	=>8-729-902-11	TRANSISTOR 2SC2021				
Q419	=>8-729-902-11	TRANSISTOR 2SC2021				
Q420	=>8-729-902-11	TRANSISTOR 2SC2021				
Q421	=>8-729-902-11	TRANSISTOR 2SC2021				
		RESISTOR				
R401	1-246-467-00	CARBON	560	5%	1/4W	
R402	1-246-469-00	CARBON	680	5%	1/4W	
R403	1-246-514-00	CARBON	51K	5%	1/4W	
R404	1-246-505-00	CARBON	22K	5%	1/4W	
R405	1-246-490-00	CARBON	5.1K	5%	1/4W	
R407	1-246-790-00	CARBON	3.9K	5%	1/8W	
R408	1-246-449-00	CARBON	100	5%	1/4W	
R409	1-246-782-00	CARBON	820	5%	1/8W	
R410	1-246-840-00	CARBON	510	5%	1/8W	
R411	1-246-789-00	CARBON	3.3K	5%	1/8W	
R412	1-246-492-00	CARBON	6.2K	5%	1/4W	
R413	1-246-841-00	CARBON	620	5%	1/8W	
R414	1-246-440-00	CARBON	43	5%	1/4W	
R415	1-246-473-00	CARBON	1K	5%	1/4W	
R416	1-246-793-00	CARBON	6.8K	5%	1/8W	
R417	1-246-777-00	CARBON	330	5%	1/8W	
R418	1-246-793-00	CARBON	6.8K	5%	1/8W	
R419	1-246-852-00	CARBON	5.1K	5%	1/8W	
R420	1-246-852-00	CARBON	5.1K	5%	1/8W	
R421	1-246-484-00	CARBON	3K	5%	1/4W	
R422	1-246-852-00	CARBON	5.1K	5%	1/8W	
R423	1-246-852-00	CARBON	5.1K	5%	1/8W	
R424	1-246-484-00	CARBON	3K	5%	1/4W	
R425	1-246-473-00	CARBON	1K	5%	1/4W	
R426	1-246-783-00	CARBON	1K	5%	1/8W	
R427	1-246-478-00	CARBON	1.6K	5%	1/4W	
R428	1-246-485-00	CARBON	3.3K	5%	1/4W	
R429	1-246-485-00	CARBON	3.3K	5%	1/4W	
R430	1-246-787-00	CARBON	2.2K	5%	1/8W	
R431	1-246-771-00	CARBON	100	5%	1/8W	
R432	1-246-834-00	CARBON	160	5%	1/8W	
R433	1-246-834-00	CARBON	160	5%	1/8W	
R434	1-246-852-00	CARBON	5.1K	5%	1/8W	
R435	1-246-850-00	CARBON	36K	5%	1/8W	
R436	1-246-777-00	CARBON	330	5%	1/8W	
R437	1-246-777-00	CARBON	330	5%	1/8W	
R438	1-246-852-00	CARBON	5.1K	5%	1/8W	
R439	1-246-479-00	CARBON	1.8K	5%	1/4W	
R440	1-246-492-00	CARBON	6.2K	5%	1/4W	
R441	1-246-513-00	CARBON	47K	5%	1/4W	
R442	1-246-513-00	CARBON	47K	5%	1/4W	
R443	1-214-174-00	METAL	56K	1%	1/4W	
R444	1-246-807-00	CARBON	100K	5%	1/8W	
R445	1-246-513-00	CARBON	47K	5%	1/4W	
R446	1-214-156-00	METAL	10K	1%	1/4W	
R447	1-246-807-00	CARBON	100K	5%	1/8W	
R448	1-214-180-00	METAL	100K	1%	1/4W	
R450	1-246-803-00	CARBON	47K	5%	1/8W	
R451	1-246-804-00	CARBON	56K	5%	1/8W	
R452	1-246-803-00	CARBON	47K	5%	1/8W	
R453	1-246-804-00	CARBON	56K	5%	1/8W	
R454	1-246-521-00	CARBON	100K	5%	1/4W	
R457	1-246-807-00	CARBON	100K	5%	1/8W	
R459	1-246-492-00	CARBON	6.2K	5%	1/4W	
R460	1-246-488-00	CARBON	4.3K	5%	1/4W	
R461	1-246-789-00	CARBON	3.3K	5%	1/8W	
R462	1-246-789-00	CARBON	3.3K	5%	1/8W	
R463	1-246-800-00	CARBON	27K	5%	1/8W	
R464	1-246-810-00	CARBON	180K	5%	1/8W	
R465	1-246-505-00	CARBON	22K	5%	1/4W	
R466	1-246-799-00	CARBON	22K	5%	1/8W	
R467	1-246-515-00	CARBON	56K	5%	1/4W	
R468	1-246-515-00	CARBON	56K	5%	1/4W	
R469	1-246-509-00	CARBON	33K	5%	1/4W	
R470	1-246-505-00	CARBON	22K	5%	1/4W	
R471	1-246-515-00	CARBON	56K	5%	1/4W	
R472	1-246-804-00	CARBON	56K	5%	1/8W	
R473	1-246-804-00	CARBON	56K	5%	1/8W	
R474	1-246-521-00	CARBON	100K	5%	1/4W	
R475	1-246-799-00	CARBON	22K	5%	1/8W	
R476	1-246-505-00	CARBON	22K	5%	1/4W	
R477	1-246-795-00	CARBON	10K	5%	1/8W	
R478	1-246-804-00	CARBON	56K	5%	1/8W	
R479	1-246-791-00	CARBON	4.7K	5%	1/8W	
R480	1-246-839-00	CARBON	430	5%	1/8W	
R481	1-246-449-00	CARBON	100	5%	1/4W	
R482	1-246-787-00	CARBON	2.2K	5%	1/8W	
R483	1-246-787-00	CARBON	2.2K	5%	1/8W	
		VARIABLE RESISTOR				
RV401	1-224-250-XX	RES, ADJ, METAL GLAZE 2.2K				
RV402	1-224-250-XX	RES, ADJ, METAL GLAZE 2.2K				
RV403	1-224-253-XX	RES, ADJ, SOLID 22K				

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

Ref.No	Part No	Description	Remark
RV404	1-224-253-XX	RES, ADJ, SOLID 22K	
RV405	1-224-251-XX	RES, ADJ, SOLID 4.7K	
RV406	1-224-255-XX	RES, ADJ, METAL GLAZE 100K	
RV408	1-224-254-XX	RES, ADJ, SOLID 47K	

TRANSFORMER

Ref.No	Part No	Description
T401	1-433-215-00	TRANSFORMER, OSCILLATOR

THERMISTOR

Ref.No	Part No	Description
TH401	1-800-198-XX	THERMISTOR

CRYSTAL

Ref.No	Part No	Description
X401	1-527-293-00	CRYSTAL

* * *

Part No	Description	Remark
♠:A-6711-255-A	YC-14 BOARD, COMPLETE	E-602
♠:3-661-626-00	PLATE, REAR, SHIELD CASE	
♠:3-661-659-00	CASE (MAIN), SHIELD	
♠:3-701-748-00	CLAMP	

CAPACITOR

Ref.No	Part No	Description			Remark
C001	1-161-009-00	CERAMIC	0.0047MF	10%	25V
C002	1-102-074-00	CERAMIC	0.001MF	10%	50V
C003	1-123-328-00	ELECT	4.7MF	20%	25V
C004	1-123-319-00	ELECT	47MF	20%	16V
C005	1-123-307-00	ELECT	100MF	20%	10V
C006	1-123-354-00	ELECT	3.3MF	20%	50V
C007	1-161-013-00	CERAMIC	0.01MF	10%	25V
C008	1-102-529-00	CERAMIC	100PF	5%	50V
C009	1-102-945-00	CERAMIC	8PF	1PF	50V
C010	1-161-013-00	CERAMIC	0.01MF	10%	25V
C011	1-102-499-00	CERAMIC	120PF	5%	50V
C012	1-102-973-00	CERAMIC	100PF	5%	50V
C013	1-102-820-00	CERAMIC	330PF	5%	50V
C014	1-123-316-00	ELECT	10MF	20%	16V
C015	1-161-010-00	CERAMIC	0.0056MF	10%	25V
C016	1-123-351-00	ELECT	0.47MF	20%	50V
C017	1-102-116-00	CERAMIC	680PF	10%	50V
C018	1-108-375-00	MYLAR	0.0068MF	10%	100V
C019	1-123-319-00	ELECT	47MF	20%	16V
C020	1-161-013-00	CERAMIC	0.01MF	10%	25V
C021	1-108-369-00	MYLAR	0.0022MF	10%	100V
C022	1-161-013-00	CERAMIC	0.01MF	10%	25V
C023	1-123-307-00	ELECT	100MF	20%	10V
C024	1-161-017-00	CERAMIC	0.022MF	10%	25V
C025	1-161-021-00	CERAMIC	0.047MF	10%	25V
C026	1-131-343-00	TANTALUM	0.22MF	10%	35V
C027	1-102-808-00	CERAMIC	6PF	1PF	50V
C028	1-102-953-00	CERAMIC	18PF	5%	50V
C029	1-102-953-00	CERAMIC	18PF	5%	50V
C030	1-102-942-00	CERAMIC	5PF	0.5PF	50V
C031	1-161-039-00	CERAMIC	0.001MF	10%	25V
C032	1-123-295-00	ELECT	100MF	20%	6.3V
C033	1-123-296-00	ELECT	220MF	20%	6.3V
C034	1-102-816-00	CERAMIC	120PF	5%	50V
C035	1-102-973-00	CERAMIC	100PF	5%	50V
C036	1-123-352-00	ELECT	1MF	20%	50V
C037	1-123-307-00	ELECT	100MF	20%	10V
C038	1-123-316-00	ELECT	10MF	20%	16V
C039	1-161-013-00	CERAMIC	0.01MF	10%	25V
C040	1-123-319-00	ELECT	47MF	20%	16V
C041	1-161-017-00	CERAMIC	0.022MF	10%	25V
C042	1-123-319-00	ELECT	47MF	20%	16V
C043	1-161-013-00	CERAMIC	0.01MF	10%	25V
C044	1-102-529-00	CERAMIC	100PF	5%	50V
C045	1-161-006-00	CERAMIC	0.0027MF	10%	25V
C046	1-161-004-00	CERAMIC	0.0018MF	10%	25V
C047	1-123-296-00	ELECT	220MF	20%	6.3V
C048	1-123-316-00	ELECT	10MF	20%	16V
C049	1-161-013-00	CERAMIC	0.01MF	10%	25V
C050	1-161-021-00	CERAMIC	0.047MF	10%	25V
C051	1-161-013-00	CERAMIC	0.01MF	10%	25V
C052	1-161-013-00	CERAMIC	0.01MF	10%	25V
C053	1-161-021-00	CERAMIC	0.047MF	10%	25V
C054	1-161-013-00	CERAMIC	0.01MF	10%	25V
C055	1-102-959-00	CERAMIC	22PF	5%	50V
C056	1-161-013-00	CERAMIC	0.01MF	10%	25V
C057	1-123-311-00	ELECT	1000MF	20%	10V
C058	1-123-318-00	ELECT	33MF	20%	16V
C059	1-130-224-00	FILM	0.015MF	5%	50V
C060	1-161-013-00	CERAMIC	0.01MF	10%	25V
C061	1-102-112-00	CERAMIC	330PF	10%	50V
C062	1-123-351-00	ELECT	0.47MF	20%	50V
C063	1-161-013-00	CERAMIC	0.01MF	10%	25V
C064	1-123-307-00	ELECT	100MF	20%	10V
C065	1-161-025-00	CERAMIC	0.1MF	10%	25V
C066	1-123-319-00	ELECT	47MF	20%	16V
C067	1-123-316-00	ELECT	10MF	20%	16V
C068	1-123-318-00	ELECT	33MF	20%	16V
C069	1-123-305-00	ELECT	33MF	20%	10V
C070	1-102-961-00	CERAMIC	27PF	5%	50V
C071	1-102-530-00	CERAMIC	120PF	5%	50V
C072	1-102-947-00	CERAMIC	10PF	5%	50V
C073	1-102-965-00	CERAMIC	39PF	5%	50V
C074	1-102-965-00	CERAMIC	39PF	5%	50V
C075	1-102-943-00	CERAMIC	6PF	0.5PF	50V
C076	1-161-013-00	CERAMIC	0.01MF	10%	25V
C077	1-102-116-00	CERAMIC	680PF	10%	50V
C078	1-102-116-00	CERAMIC	680PF	10%	50V
C079	1-161-013-00	CERAMIC	0.01MF	10%	25V
C080	1-161-013-00	CERAMIC	0.01MF	10%	25V
C081	1-102-973-00	CERAMIC	100PF	5%	50V
C082	1-102-973-00	CERAMIC	100PF	5%	50V
C083	1-102-117-00	CERAMIC	820PF	10%	50V

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Ref.No	Part No	Description			Remark
C084	1-161-013-00	CERAMIC	0.01MF	10%	25V
C085	1-123-306-00	ELECT	47MF	20%	10V
C086	1-123-306-00	ELECT	47MF	20%	10V
C087	1-123-351-00	ELECT	0.47MF	20%	50V
C088	1-123-351-00	ELECT	0.47MF	20%	50V
C089	1-123-306-00	ELECT	47MF	20%	10V
C090	1-123-306-00	ELECT	47MF	20%	10V
C091	1-102-824-00	CERAMIC	430PF	5%	50V
C092	1-123-328-00	ELECT	4.7MF	20%	25V
C093	1-102-117-00	CERAMIC	820PF	10%	50V
C094	1-131-343-00	TANTALUM	0.22MF	10%	35V
C095	1-161-017-00	CERAMIC	0.022MF	10%	25V
C096	1-123-353-00	ELECT	2.2MF	20%	50V
C097	1-102-935-00	CERAMIC	2PF	0.25PF	50V
C098	1-102-509-00	CERAMIC	11PF	5%	50V
C099	1-161-013-00	CERAMIC	0.01MF	10%	25V
C100	1-161-013-00	CERAMIC	0.01MF	10%	25V
C101	1-161-013-00	CERAMIC	0.01MF	10%	25V
C102	1-102-962-00	CERAMIC	30PF	5%	50V
C103	1-161-013-00	CERAMIC	0.01MF	10%	25V
C104	1-123-320-00	ELECT	100MF	20%	16V
C105	1-161-013-00	CERAMIC	0.01MF	10%	25V
C106	1-123-319-00	ELECT	47MF	20%	16V
C107	1-123-316-00	ELECT	10MF	20%	16V
C108	1-161-021-00	CERAMIC	0.047MF	10%	25V
C109	1-123-319-00	ELECT	47MF	20%	16V
C110	1-161-013-00	CERAMIC	0.01MF	10%	25V
C111	1-161-013-00	CERAMIC	0.01MF	10%	25V
C112	1-161-021-00	CERAMIC	0.047MF	10%	25V
C113	1-123-318-00	ELECT	33MF	20%	16V
C114	1-123-318-00	ELECT	33MF	20%	16V
C115	1-102-960-00	CERAMIC	24PF	5%	50V
C116	1-101-888-00	CERAMIC	68PF	5%	50V
C117	1-101-884-00	CERAMIC	56PF	5%	50V
C118	1-102-110-00	CERAMIC	220PF	10%	50V
C119	1-101-884-00	CERAMIC	56PF	5%	50V
C120	1-123-352-00	ELECT	1MF	20%	50V
C121	1-131-344-00	TANTALUM	0.33MF	10%	35V
C122	1-161-013-00	CERAMIC	0.01MF	10%	25V
C123	1-102-966-00	CERAMIC	43PF	5%	50V
C124	1-102-944-00	CERAMIC	7PF	0.5PF	50V
C125	1-161-013-00	CERAMIC	0.01MF	10%	25V
C126	1-102-112-00	CERAMIC	330PF	10%	50V
C127	1-161-013-00	CERAMIC	0.01MF	10%	25V
C128	1-123-319-00	ELECT	47MF	20%	16V
C129	1-123-295-00	ELECT	100MF	20%	6.3V
C130	1-161-013-00	CERAMIC	0.01MF	10%	25V
C131	1-161-013-00	CERAMIC	0.01MF	10%	25V
C132	1-123-296-00	ELECT	220MF	20%	6.3V
C133	1-102-820-00	CERAMIC	330PF	5%	50V
C134	1-102-980-00	CERAMIC	270PF	5%	50V
C135	1-101-059-00	CERAMIC	510PF	5%	50V
C136	1-102-980-00	CERAMIC	270PF	5%	50V
C137	1-123-306-00	ELECT	47MF	20%	10V
C138	1-123-319-00	ELECT	47MF	20%	16V
C139	1-161-013-00	CERAMIC	0.01MF	10%	25V
C140	1-123-307-00	ELECT	100MF	20%	10V
C141	1-102-962-00	CERAMIC	30PF	5%	50V
C142	1-102-959-00	CERAMIC	22PF	5%	50V
C143	1-161-013-00	CERAMIC	0.01MF	10%	25V
C144	1-161-021-00	CERAMIC	0.047MF	10%	25V
C145	1-123-319-00	ELECT	47MF	20%	16V
C146	1-161-013-00	CERAMIC	0.01MF	10%	25V
C147	1-123-322-00	ELECT	330MF	20%	16V
C148	1-123-306-00	ELECT	47MF	20%	10V
C149	1-123-316-00	ELECT	10MF	20%	16V
C150	1-123-352-00	ELECT	1MF	20%	50V
C151	1-102-972-00	CERAMIC	91PF	5%	50V
C152	1-102-966-00	CERAMIC	43PF	5%	50V
C153	1-102-816-00	CERAMIC	120PF	5%	50V
C154	1-123-316-00	ELECT	10MF	20%	16V
C155	1-123-316-00	ELECT	10MF	20%	16V
C156	1-161-021-00	CERAMIC	0.047MF	10%	25V
C157	1-161-021-00	CERAMIC	0.047MF	10%	25V
C158	1-123-307-00	ELECT	100MF	20%	10V
C159	1-123-316-00	ELECT	10MF	20%	16V
C160	1-161-013-00	CERAMIC	0.01MF	10%	25V
C161	1-123-316-00	ELECT	10MF	20%	16V
C162	1-123-307-00	ELECT	100MF	20%	10V
C163	1-123-307-00	ELECT	100MF	20%	10V
C164	1-123-351-00	ELECT	0.47MF	20%	50V
C165	1-123-316-00	ELECT	10MF	20%	16V
C166	1-161-013-00	CERAMIC	0.01MF	10%	25V
C167	1-123-307-00	ELECT	100MF	20%	10V
C168	1-161-005-00	CERAMIC	0.0022MF	10%	25V
C170	1-123-316-00	ELECT	10MF	20%	16V
C171	1-123-352-00	ELECT	1MF	20%	50V
C172	1-102-127-00	CERAMIC	0.0068MF	10%	50V
C173	1-102-973-00	CERAMIC	100PF	5%	50V
C174	1-161-025-00	CERAMIC	0.1MF	10%	25V
C177	1-161-013-00	CERAMIC	0.01MF	10%	25V
C178	1-161-013-00	CERAMIC	0.01MF	10%	25V
C179	1-161-013-00	CERAMIC	0.01MF	10%	25V
C180	1-161-013-00	CERAMIC	0.01MF	10%	25V

CONNECTOR

CN001♠:1-508-744-00 PIN, CONNECTOR 10P
CN002♠:1-508-743-00 PIN, CONNECTOR 5P
CN003♠:1-508-743-00 PIN, CONNECTOR 5P
CN004♠:1-508-845-00 PIN, CONNECTOR 6P
CN005♠:1-508-743-00 PIN, CONNECTOR 5P

CN006♠:1-508-744-00 PIN, CONNECTOR 10P
CN007♠:1-508-742-00 PIN, CONNECTOR 3P
CN008♠:1-508-736-00 PIN, CONNECTOR 10P
CN009♠:1-508-736-00 PIN, CONNECTOR 10P
CN010♠:1-508-734-00 PIN, CONNECTOR 3P

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Ref.No	Part No	Description	Remark
		DIODE	
D001	8-719-815-55	DIODE 1S1555	
D002	8-719-815-55	DIODE 1S1555	
D003	8-719-815-55	DIODE 1S1555	
D004	8-719-815-55	DIODE 1S1555	
D006	8-719-815-55	DIODE 1S1555	
D007	8-719-815-55	DIODE 1S1555	
D008	8-719-815-55	DIODE 1S1555	
D009	8-719-815-55	DIODE 1S1555	
D010	8-719-815-55	DIODE 1S1555	
D011	8-719-815-55	DIODE 1S1555	
D012	8-719-815-55	DIODE 1S1555	
D013	8-719-815-55	DIODE 1S1555	
D014	8-719-815-55	DIODE 1S1555	
D015	8-719-815-55	DIODE 1S1555	
D016	8-719-815-55	DIODE 1S1555	
D017	8-719-815-55	DIODE 1S1555	
		DELAY LINE	
DL001	1-415-065-00	DELAY LINE	
DL002	1-415-159-00	DELAY LINE (1H)	
		IC	
IC001	8-751-960-00	IC CX-196	
IC002	8-743-904-00	IC BX-3904	
IC003	8-759-684-78	IC M58478P	
IC004	8-751-350-00	IC CX-135	
IC005	8-743-640-00	IC BX-364	
IC006	8-751-880-00	IC CX-188	
IC007	8-751-870-00	IC CX-187	
IC008	8-743-912-00	IC BX-3912	
IC009	8-759-908-25	IC CX-825	
IC010	8-743-901-00	IC BX-3901	
IC011	8-743-903-00	IC BX-3903	
IC012	8-743-840-00	IC BX-384	
IC013	8-743-830-00	IC BX-383	
		JACK	
J001	1-507-588-11	PIN JACK, 1P	
J002	1-507-588-11	PIN JACK, 1P	
J003	1-507-251-XX	JACK	
J004	1-507-251-XX	JACK	
J005	1-507-251-XX	JACK	
		COIL	
L001	1-407-191-XX	MICRO INDUCTOR 470UH	
L002	1-407-168-XX	MICRO INDUCTOR 82UH	
L003	1-407-718-00	MICRO INDUCTOR 1.2MMH	
L004	1-407-171-XX	MICRO INDUCTOR 150UH	
L005	1-407-696-00	MICRO INDUCTOR 18UH	
L006	1-407-696-00	MICRO INDUCTOR 18UH	
L007	1-407-168-XX	MICRO INDUCTOR 82UH	
L008	1-407-167-XX	MICRO INDUCTOR 68UH	
L009	1-407-169-XX	MICRO INDUCTOR 100UH	
L010	1-407-171-XX	MICRO INDUCTOR 150UH	
L011	1-407-503-00	MICRO INDUCTOR 8.2MMH	
L012	1-407-709-00	MICRO INDUCTOR 220UH	
L013	1-407-165-XX	MICRO INDUCTOR 47UH	
L014	1-407-747-11	MICRO INDUCTOR 56UH	
L015	1-407-569-00	COIL,VARIABLE 10.0MH	
L016	1-407-189-XX	MICRO INDUCTOR 8.2UH	
L017	1-407-171-XX	MICRO INDUCTOR 150UH	
L018	1-407-162-XX	MICRO INDUCTOR 27UH	
L019	1-407-158-XX	MICRO INDUCTOR 12UH	
L020	1-407-189-XX	MICRO INDUCTOR 8.2UH	
L021	1-407-159-XX	MICRO INDUCTOR 15UH	
L022	1-407-169-XX	MICRO INDUCTOR 100UH	
L023	1-407-706-00	MICRO INDUCTOR 120UH	
L024	1-407-169-XX	MICRO INDUCTOR 100UH	
L025	1-407-164-XX	MICRO INDUCTOR 39UH	
L026	1-407-164-XX	MICRO INDUCTOR 39UH	
L027	1-407-172-XX	MICRO INDUCTOR 180UH	
L028	1-407-709-00	MICRO INDUCTOR 220UH	
L029	1-407-172-XX	MICRO INDUCTOR 180UH	
L030	1-407-163-XX	MICRO INDUCTOR 33UH	
		TRANSISTOR	
Q001	8-729-902-11	TRANSISTOR 2SC2021	
Q002	8-729-902-11	TRANSISTOR 2SC2021	
Q003	8-729-902-11	TRANSISTOR 2SC2021	
Q004	=>8-729-117-54	TRANSISTOR 2SA1175	
Q005	8-729-384-48	TRANSISTOR 2SA844	
Q006	8-729-902-11	TRANSISTOR 2SC2021	
Q007	8-729-902-11	TRANSISTOR 2SC2021	
Q008	8-724-375-01	TRANSISTOR 2SC403C	
Q009	8-724-375-01	TRANSISTOR 2SC403C	
Q010	8-729-902-11	TRANSISTOR 2SC2021	
Q011	=>8-729-178-54	TRANSISTOR 2SC2785	
Q012	8-729-902-11	TRANSISTOR 2SC2021	
Q013	8-729-902-11	TRANSISTOR 2SC2021	
Q014	8-729-902-11	TRANSISTOR 2SC2021	
Q015	8-729-902-11	TRANSISTOR 2SC2021	
Q016	8-729-902-11	TRANSISTOR 2SC2021	
Q017	8-729-902-11	TRANSISTOR 2SC2021	
Q018	8-724-375-01	TRANSISTOR 2SC403C	
Q019	8-729-902-11	TRANSISTOR 2SC2021	
Q020	=>8-729-117-54	TRANSISTOR 2SA1175	
Q021	8-729-902-11	TRANSISTOR 2SC2021	
Q022	8-729-902-11	TRANSISTOR 2SC2021	
Q023	8-724-375-01	TRANSISTOR 2SC403C	
Q024	8-729-384-48	TRANSISTOR 2SA844	
Q025	8-724-375-01	TRANSISTOR 2SC403C	
Q026	8-729-902-11	TRANSISTOR 2SC2021	
Q027	8-729-902-11	TRANSISTOR 2SC2021	
Q028	8-724-375-01	TRANSISTOR 2SC403C	

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

Ref.No	Part No	Description	Remark
Q029	8-724-375-01	TRANSISTOR 2SC403C	
Q030	8-729-384-48	TRANSISTOR 2SA844	
Q031	8-729-902-11	TRANSISTOR 2SC2021	
Q032	8-724-375-01	TRANSISTOR 2SC403C	
Q033	8-729-902-11	TRANSISTOR 2SC2021	
Q034	8-729-902-11	TRANSISTOR 2SC2021	
Q035	8-729-902-11	TRANSISTOR 2SC2021	
Q036	8-729-902-11	TRANSISTOR 2SC2021	
Q037	8-724-375-01	TRANSISTOR 2SC403C	
Q038	8-724-375-01	TRANSISTOR 2SC403C	
Q039	8-729-384-48	TRANSISTOR 2SA844	
Q040	8-729-384-48	TRANSISTOR 2SA844	
Q041	8-729-902-11	TRANSISTOR 2SC2021	

RESISTOR

Ref.No	Part No	Description				Remark
R001	1-246-511-00	CARBON	39K	5%	1/4W	
R002	1-246-497-00	CARBON	10K	5%	1/4W	
R003	1-246-461-00	CARBON	330	5%	1/4W	
R004	1-246-491-00	CARBON	5.6K	5%	1/4W	
R005	1-246-451-00	CARBON	120	5%	1/4W	
R006	1-246-490-00	CARBON	5.1K	5%	1/4W	
R007	1-246-523-00	CARBON	120K	5%	1/4W	
R008	1-246-478-00	CARBON	1.6K	5%	1/4W	
R009	1-246-480-00	CARBON	2K	5%	1/4W	
R010	1-246-505-00	CARBON	22K	5%	1/4W	
R011	1-246-513-00	CARBON	47K	5%	1/4W	
R012	1-246-475-00	CARBON	1.2K	5%	1/4W	
R013	1-246-521-00	CARBON	100K	5%	1/4W	
R014	1-246-531-00	CARBON	270K	5%	1/4W	
R015	1-246-501-00	CARBON	15K	5%	1/4W	
R016	1-246-461-00	CARBON	330	5%	1/4W	
R017	1-246-472-00	CARBON	910	5%	1/4W	
R018	1-246-521-00	CARBON	100K	5%	1/4W	
R019	1-246-485-00	CARBON	3.3K	5%	1/4W	
R020	1-246-513-00	CARBON	47K	5%	1/4W	
R021	1-246-489-00	CARBON	4.7K	5%	1/4W	
R022	1-246-481-00	CARBON	2.2K	5%	1/4W	
R023	1-210-829-00	COMPOSITION	4.7M	5%	1/4W	
R024	1-246-465-00	CARBON	470	5%	1/4W	
R025	1-246-477-00	CARBON	1.5K	5%	1/4W	
R026	1-246-491-00	CARBON	5.6K	5%	1/4W	
R027	1-246-513-00	CARBON	47K	5%	1/4W	
R028	1-246-495-00	CARBON	8.2K	5%	1/4W	
R029	1-246-497-00	CARBON	10K	5%	1/4W	
R030	1-246-485-00	CARBON	3.3K	5%	1/4W	
R031	1-246-473-00	CARBON	1K	5%	1/4W	
R032	1-246-475-00	CARBON	1.2K	5%	1/4W	
R033	1-246-513-00	CARBON	47K	5%	1/4W	
R034	1-246-799-00	CARBON	22K	5%	1/8W	
R035	1-246-521-00	CARBON	100K	5%	1/4W	
R036	1-246-496-00	CARBON	9.1K	5%	1/4W	
R037	1-246-857-00	CARBON	13K	5%	1/8W	
R038	1-246-473-00	CARBON	1K	5%	1/4W	

Ref.No	Part No	Description				Remark
R039	1-246-469-00	CARBON	680	5%	1/4W	
R040	1-246-441-00	CARBON	47	5%	1/4W	
R043	1-246-481-00	CARBON	2.2K	5%	1/4W	
R044	1-246-465-00	CARBON	470	5%	1/4W	
R045	1-246-776-00	CARBON	270	5%	1/8W	
R046	1-246-449-00	CARBON	100	5%	1/4W	
R047	1-246-467-00	CARBON	560	5%	1/4W	
R048	1-246-459-00	CARBON	270	5%	1/4W	
R049	1-246-441-00	CARBON	47	5%	1/4W	
R050	1-246-453-00	CARBON	150	5%	1/4W	
R051	1-246-465-00	CARBON	470	5%	1/4W	
R052	1-246-449-00	CARBON	100	5%	1/4W	
R053	1-246-501-00	CARBON	15K	5%	1/4W	
R054	1-246-503-00	CARBON	18K	5%	1/4W	
R055	1-246-477-00	CARBON	1.5K	5%	1/4W	
R056	1-246-485-00	CARBON	3.3K	5%	1/4W	
R057	1-246-487-00	CARBON	3.9K	5%	1/4W	
R058	1-246-491-00	CARBON	5.6K	5%	1/4W	
R059	1-246-480-00	CARBON	2K	5%	1/4W	
R060	1-246-470-00	CARBON	750	5%	1/4W	
R061	1-246-473-00	CARBON	1K	5%	1/4W	
R062	1-246-512-00	CARBON	43K	5%	1/4W	
R063	1-246-457-00	CARBON	220	5%	1/4W	
R064	1-246-505-00	CARBON	22K	5%	1/4W	
R065	1-246-521-00	CARBON	100K	5%	1/4W	
R066	1-246-509-00	CARBON	33K	5%	1/4W	
R067	1-246-497-00	CARBON	10K	5%	1/4W	
R068	1-246-471-00	CARBON	820	5%	1/4W	
R069	1-246-445-00	CARBON	68	5%	1/4W	
R070	1-244-860-00	CARBON	300	5%	1/2W	
R071	1-246-481-00	CARBON	2.2K	5%	1/4W	
R072	1-246-481-00	CARBON	2.2K	5%	1/4W	
R073	1-246-501-00	CARBON	15K	5%	1/4W	
R074	1-246-509-00	CARBON	33K	5%	1/4W	
R075	1-246-485-00	CARBON	3.3K	5%	1/4W	
R076	1-246-446-00	CARBON	75	5%	1/4W	
R077	1-246-446-00	CARBON	75	5%	1/4W	
R078	1-246-497-00	CARBON	10K	5%	1/4W	
R079	1-246-513-00	CARBON	47K	5%	1/4W	
R080	1-246-489-00	CARBON	4.7K	5%	1/4W	
R081	1-246-513-00	CARBON	47K	5%	1/4W	
R082	1-246-497-00	CARBON	10K	5%	1/4W	
R083	1-246-473-00	CARBON	1K	5%	1/4W	
R084	1-246-456-00	CARBON	200	5%	1/4W	
R085	1-246-481-00	CARBON	2.2K	5%	1/4W	
R086	1-246-452-00	CARBON	130	5%	1/4W	
R087	1-246-473-00	CARBON	1K	5%	1/4W	
R088	1-246-497-00	CARBON	10K	5%	1/4W	
R089	1-246-488-00	CARBON	4.3K	5%	1/4W	
R090	1-246-507-00	CARBON	27K	5%	1/4W	
R091	1-246-473-00	CARBON	1K	5%	1/4W	
R092	1-246-475-00	CARBON	1.2K	5%	1/4W	
R093	1-246-471-00	CARBON	820	5%	1/4W	

Ref.No	Part No	Description				Remark
R094	1-246-497-00	CARBON	10K	5%	1/4W	
R095	1-246-488-00	CARBON	4.3K	5%	1/4W	
R096	1-246-521-00	CARBON	100K	5%	1/4W	
R097	1-246-481-00	CARBON	2.2K	5%	1/4W	
R098	1-246-780-00	CARBON	560	5%	1/8W	
R099	1-246-515-00	CARBON	56K	5%	1/4W	
R100	1-246-515-00	CARBON	56K	5%	1/4W	
R101	1-210-819-00	COMPOSITION	1.8M	5%	1/4W	
R102	1-246-542-00	CARBON	750K	5%	1/4W	
R103	1-246-485-00	CARBON	3.3K	5%	1/4W	
R104	1-246-481-00	CARBON	2.2K	5%	1/4W	
R105	1-246-493-00	CARBON	6.8K	5%	1/4W	
R106	1-246-513-00	CARBON	47K	5%	1/4W	
R107	1-246-497-00	CARBON	10K	5%	1/4W	
R108	1-246-795-00	CARBON	10K	5%	1/8W	
R109	1-246-791-00	CARBON	4.7K	5%	1/8W	
R110	1-246-491-00	CARBON	5.6K	5%	1/4W	
R111	1-246-852-00	CARBON	5.1K	5%	1/8W	
R112	1-246-477-00	CARBON	1.5K	5%	1/4W	
R113	1-246-473-00	CARBON	1K	5%	1/4W	
R114	1-246-481-00	CARBON	2.2K	5%	1/4W	
R115	1-246-505-00	CARBON	22K	5%	1/4W	
R116	1-246-449-00	CARBON	100	5%	1/4W	
R117	1-246-466-00	CARBON	510	5%	1/4W	
R118	1-246-479-00	CARBON	1.8K	5%	1/4W	
R119	1-246-441-00	CARBON	47	5%	1/4W	
R120	1-246-465-00	CARBON	470	5%	1/4W	
R121	1-246-465-00	CARBON	470	5%	1/4W	
R122	1-246-465-00	CARBON	470	5%	1/4W	
R123	1-246-475-00	CARBON	1.2K	5%	1/4W	
R124	1-246-473-00	CARBON	1K	5%	1/4W	
R125	1-246-505-00	CARBON	22K	5%	1/4W	
R126	1-246-803-00	CARBON	47K	5%	1/8W	
R127	1-246-497-00	CARBON	10K	5%	1/4W	
R128	1-246-473-00	CARBON	1K	5%	1/4W	
R129	1-246-489-00	CARBON	4.7K	5%	1/4W	
R130	1-246-505-00	CARBON	22K	5%	1/4W	
R131	1-246-481-00	CARBON	2.2K	5%	1/4W	
R132	1-246-854-00	CARBON	7.5K	5%	1/8W	
R133	1-246-503-00	CARBON	18K	5%	1/4W	
R134	1-246-469-00	CARBON	680	5%	1/4W	
R135	1-246-850-00	CARBON	36K	5%	1/8W	
R136	1-246-792-00	CARBON	5.6K	5%	1/8W	
R137	1-246-781-00	CARBON	680	5%	1/8W	
R138	1-246-781-00	CARBON	680	5%	1/8W	
R139	1-246-781-00	CARBON	680	5%	1/8W	
R140	1-246-469-00	CARBON	680	5%	1/4W	
R141	1-246-463-00	CARBON	390	5%	1/4W	
R142	1-246-481-00	CARBON	2.2K	5%	1/4W	
R143	1-246-452-00	CARBON	130	5%	1/4W	
R144	1-246-469-00	CARBON	680	5%	1/4W	
R145	1-246-465-00	CARBON	470	5%	1/4W	
R146	1-246-475-00	CARBON	1.2K	5%	1/4W	

Ref.No	Part No	Description				Remark
R147	1-246-783-00	CARBON	1K	5%	1/8W	
R148	1-246-465-00	CARBON	470	5%	1/4W	
R149	1-246-473-00	CARBON	1K	5%	1/4W	
R150	1-246-475-00	CARBON	1.2K	5%	1/4W	
R151	1-246-481-00	CARBON	2.2K	5%	1/4W	
R152	1-246-473-00	CARBON	1K	5%	1/4W	
R153	1-246-501-00	CARBON	15K	5%	1/4W	
R154	1-246-473-00	CARBON	1K	5%	1/4W	
R155	1-246-497-00	CARBON	10K	5%	1/4W	
R156	1-246-482-00	CARBON	2.4K	5%	1/4W	
R157	1-246-470-00	CARBON	750	5%	1/4W	
R158	1-246-489-00	CARBON	4.7K	5%	1/4W	
R159	1-246-481-00	CARBON	2.2K	5%	1/4W	
R160	1-246-470-00	CARBON	750	5%	1/4W	
R161	1-246-509-00	CARBON	33K	5%	1/4W	
R162	1-246-503-00	CARBON	18K	5%	1/4W	
R163	1-246-469-00	CARBON	680	5%	1/4W	
R164	1-246-491-00	CARBON	5.6K	5%	1/4W	
R165	1-246-479-00	CARBON	1.8K	5%	1/4W	
R166	1-246-797-00	CARBON	15K	5%	1/8W	
R167	1-246-491-00	CARBON	5.6K	5%	1/4W	
R168	1-246-467-00	CARBON	560	5%	1/4W	
R169	1-246-797-00	CARBON	15K	5%	1/8W	
R170	1-246-485-00	CARBON	3.3K	5%	1/4W	
R171	1-246-467-00	CARBON	560	5%	1/4W	
R172	1-246-465-00	CARBON	470	5%	1/4W	
R173	1-246-480-00	CARBON	2K	5%	1/4W	
R174	1-246-505-00	CARBON	22K	5%	1/4W	
R175	1-246-797-00	CARBON	15K	5%	1/8W	
R176	1-246-490-00	CARBON	5.1K	5%	1/4W	
R177	1-246-495-00	CARBON	8.2K	5%	1/4W	
R178	1-246-471-00	CARBON	820	5%	1/4W	
R179	1-246-795-00	CARBON	10K	5%	1/8W	
R180	1-246-479-00	CARBON	1.8K	5%	1/4W	
R181	1-246-485-00	CARBON	3.3K	5%	1/4W	
R182	1-246-467-00	CARBON	560	5%	1/4W	
R183	1-246-484-00	CARBON	3K	5%	1/4W	
R184	1-246-505-00	CARBON	22K	5%	1/4W	
R185	1-246-505-00	CARBON	22K	5%	1/4W	
R186	1-212-705-00	METAL	130K	1%	1/2W	
R187	1-246-513-00	CARBON	47K	5%	1/4W	
R188	1-246-489-00	CARBON	4.7K	5%	1/4W	
R189	1-246-453-00	CARBON	150	5%	1/4W	
R190	1-246-490-00	CARBON	5.1K	5%	1/4W	
R191	1-246-803-00	CARBON	47K	5%	1/8W	
R192	1-246-497-00	CARBON	10K	5%	1/4W	
R193	1-246-799-00	CARBON	22K	5%	1/8W	

VARIABLE RESISTOR

RV001	1-224-250-XX	RES, ADJ, SOLID 2.2K
RV002	1-224-249-XX	RES, ADJ, SOLID 1K
RV003	1-224-250-XX	RES, ADJ, SOLID 2.2K
RV004	1-224-252-XX	RES, ADJ, SOLID 10K

Ref.No	Part No	Description	Remark
RV005	1-224-249-XX	RES, ADJ, SOLID 1K	
RV006	1-224-248-XX	RES, ADJ, SOLID 470	
RV007	1-224-249-XX	RES, ADJ, SOLID 1K	
RV008	1-224-250-XX	RES, ADJ, SOLID 2.2K	
RV009	1-224-250-XX	RES, ADJ, SOLID 2.2K	
RV010	1-224-249-XX	RES, ADJ, SOLID 1K	
RV011	1-224-249-XX	RES, ADJ, SOLID 1K	
RV012	1-224-248-XX	RES, ADJ, SOLID 470	
RV013	1-224-255-XX	RES, ADJ, SOLID 100K	
RV014	1-224-254-XX	RES, ADJ, SOLID 47K	
RV015	1-224-252-XX	RES, ADJ, SOLID 10K	
RV016	1-224-253-XX	RES, ADJ, SOLID 22K	

SWITCH

S001	1-552-821-00	SWITCH, SLIDE
S002	1-553-034-00	SWITCH, SLIDE

TRANSFORMER

T001	1-231-728-00	FILTER, BANDPASS (2)
T002	1-415-083-00	COIL, EQT-1
T003	1-231-412-00	FILTER BLOCK
T004	1-425-785-31	TRANSFORMER, BURST AMP(BAT)
T005	1-231-727-00	FILTER, BANDPASS (1)
T006	1-411-104-00	COIL, BPT-5
T007	1-425-993-00	TRANSFORMER, BANDPASS
T008	1-425-992-00	COIL, EQUALIZER

CRYSTAL

X001	1-527-154-00	CRYSTAL OSCILLATOR 3.57954MHZ

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♠:A-6711-256-A	RP-4 BOARD, COMPLETE	E-301
♠:3-664-420-00	LID, REAR, SHIELD CASE (B)	
♠:3-664-421-00	CASE (B) (MAIN), SHIELD	

CAPACITOR

C001	1-161-051-00	CERAMIC	0.01MF	30%	25V
C002	1-161-051-00	CERAMIC	0.01MF	30%	25V
C003	1-101-005-00	CERAMIC	0.022MF		50V
C004	1-123-318-00	ELECT	33MF	20%	16V
C005	1-123-351-00	ELECT	0.47MF	20%	50V
C006	1-161-051-00	CERAMIC	0.01MF	30%	25V
C007	1-123-352-00	ELECT	1MF	20%	50V
C008	1-101-006-00	CERAMIC	0.047MF		50V
C009	1-161-051-00	CERAMIC	0.01MF	30%	25V
C010	1-123-352-00	ELECT	1MF	20%	50V
C011	1-123-352-00	ELECT	1MF	20%	50V
C012	1-101-006-00	CERAMIC	0.047MF		50V
C013	1-101-004-00	CERAMIC	0.01MF		50V
C014	1-101-005-00	CERAMIC	0.022MF		50V
C015	1-161-494-00	CERAMIC	0.022MF	30%	25V

Ref.No	Part No	Description			Remark
C016	1-101-005-00	CERAMIC	0.022MF		50V
C017	1-161-494-00	CERAMIC	0.022MF	30%	25V
C019	1-123-352-00	ELECT	1MF	20%	50V
C020	1-101-005-00	CERAMIC	0.022MF		50V
C021	1-123-352-00	ELECT	1MF	20%	50V
C022	1-101-006-00	CERAMIC	0.047MF		50V
C023	1-101-004-00	CERAMIC	0.01MF		50V
C024	1-131-371-00	TANTALUM	10MF	20%	16V
C025	1-123-353-00	ELECT	2.2MF	20%	50V
C026	1-161-047-00	CERAMIC	0.0047MF	30%	50V
C029	1-101-886-00	CERAMIC	62PF	5%	50V
C030	1-101-886-00	CERAMIC	62PF	5%	50V
C031	1-101-005-00	CERAMIC	0.022MF		50V
C032	1-123-316-00	ELECT	10MF	20%	16V
C033	1-108-370-00	MYLAR	0.0027MF	10%	100V
C034	1-161-319-00	CERAMIC	470PF	10%	50V
C035	1-161-271-00	CERAMIC	100PF	5%	50V
C036	1-161-319-00	CERAMIC	470PF	10%	50V
C037	1-161-051-00	CERAMIC	0.01MF	30%	25V
C038	1-108-370-00	MYLAR	0.0027MF	10%	100V
C039	1-131-371-00	TANTALUM	10MF	20%	16V
C040	1-161-317-00	CERAMIC	330PF	10%	50V
C041	1-161-494-00	CERAMIC	0.022MF	30%	25V
C042	1-161-494-00	CERAMIC	0.022MF	30%	25V

CONNECTOR

CN001♠:	1-508-743-00	PIN, CONNECTOR 5P
CN002♠:	1-508-845-00	PIN, CONNECTOR 6P
CN003♠:	1-508-744-00	PIN, CONNECTOR 10P
CN004♠:	1-508-847-00	PIN, CONNECTOR 4P

DIODE

D001	8-719-815-55	DIODE 1S1555
D002	8-719-815-55	DIODE 1S1555
D003	8-719-815-55	DIODE 1S1555
D004	8-719-815-55	DIODE 1S1555
D005	8-719-815-55	DIODE 1S1555
D006	8-719-815-55	DIODE 1S1555
D007	8-719-815-55	DIODE 1S1555
D008	8-719-815-55	DIODE 1S1555

IC

IC001	8-751-340-00	IC CX-134A

COIL

L001	1-407-157-XX	MICRO INDUCTOR 10UH
L002	1-408-029-00	MICRO INDUCTOR 0.56UH
L003	1-408-029-00	MICRO INDUCTOR 0.56UH
L004	1-408-029-00	MICRO INDUCTOR 0.56UH
L005	1-408-158-00	MICRO INDUCTOR 6.8MMH
L006	1-408-158-00	MICRO INDUCTOR 6.8MMH
L007	1-407-158-XX	MICRO INDUCTOR 12UH
L008	1-407-158-XX	MICRO INDUCTOR 12UH

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref.No	Part No	Description				Remark
L009	1-407-706-00	MICRO INDUCTOR 120UH				
L010	1-407-496-00	MICRO INDUCTOR 2.2MMH				
L011	1-407-195-XX	MICRO INDUCTOR 1MMH				

VARIABLE COIL

LV001	1-407-286-00	MICRO INDUCTOR 2.2MMH				

TRANSISTOR

Q001	=>8-729-663-47	TRANSISTOR 2SC1364				
Q002	8-729-384-48	TRANSISTOR 2SA844				
Q003	=>8-729-612-77	TRANSISTOR 2SA1027R				
Q004	=>8-729-663-47	TRANSISTOR 2SC1364				
Q005	8-724-375-01	TRANSISTOR 2SC403C				
Q006	8-729-178-54	TRANSISTOR 2SC2785				
Q007	8-765-423-00	TRANSISTOR 2SK152-3				
Q008	8-765-423-00	TRANSISTOR 2SK152-3				
Q009	8-729-178-54	TRANSISTOR 2SC2785				
Q010	8-729-178-54	TRANSISTOR 2SC2785				
Q011	8-729-178-54	TRANSISTOR 2SC2785				
Q012	8-724-375-01	TRANSISTOR 2SC403C				
Q013	8-765-423-00	TRANSISTOR 2SK152-3				
Q014	8-724-375-01	TRANSISTOR 2SC403C				
Q015	8-729-178-54	TRANSISTOR 2SC2785				

RESISTOR

R001 ⚠.	1-247-028-00	CARBON	8.2	5%	1/8W	F
R002	1-246-502-00	CARBON	16K	5%	1/4W	
R003	1-246-485-00	CARBON	3.3K	5%	1/4W	
R004	1-246-473-00	CARBON	1K	5%	1/4W	
R005	1-246-781-00	CARBON	680	5%	1/8W	
R006	1-246-463-00	CARBON	390	5%	1/4W	
R007	1-246-519-00	CARBON	82K	5%	1/4W	
R008	1-246-795-00	CARBON	10K	5%	1/8W	
R009	1-246-464-00	CARBON	430	5%	1/4W	
R010	1-246-422-00	CARBON	7.5	5%	1/4W	
R011	1-246-477-00	CARBON	1.5K	5%	1/4W	
R012	1-246-477-00	CARBON	1.5K	5%	1/4W	
R013 ⚠.	1-211-929-00	CARBON	82	5%	1/8W	F
R014	1-246-449-00	CARBON	100	5%	1/4W	
R015	1-246-515-00	CARBON	56K	5%	1/4W	
R016	1-246-497-00	CARBON	10K	5%	1/4W	
R017 ⚠.	1-211-421-00	CARBON	39	5%	1/8W	F
R018	1-246-463-00	CARBON	390	5%	1/4W	
R019	1-246-485-00	CARBON	3.3K	5%	1/4W	
R020	1-246-497-00	CARBON	10K	5%	1/4W	
R021	1-246-463-00	CARBON	390	5%	1/4W	
R022	1-246-468-00	CARBON	620	5%	1/4W	
R023	1-246-795-00	CARBON	10K	5%	1/8W	
R024	1-246-792-00	CARBON	5.6K	5%	1/8W	
R025	1-246-463-00	CARBON	390	5%	1/4W	
R026	1-246-485-00	CARBON	3.3K	5%	1/4W	
R027	1-246-463-00	CARBON	390	5%	1/4W	
R028	1-246-468-00	CARBON	620	5%	1/4W	

Ref.No	Part No	Description				Remark
R029	1-246-497-00	CARBON	10K	5%	1/4W	
R030	1-246-490-00	CARBON	5.1K	5%	1/4W	
R031	1-246-513-00	CARBON	47K	5%	1/4W	
R032	1-246-485-00	CARBON	3.3K	5%	1/4W	
R033	1-246-484-00	CARBON	3K	5%	1/4W	
R034	1-246-468-00	CARBON	620	5%	1/4W	
R035	1-246-463-00	CARBON	390	5%	1/4W	
R036	1-246-468-00	CARBON	620	5%	1/4W	
R037	1-246-449-00	CARBON	100	5%	1/4W	
R038	1-246-464-00	CARBON	430	5%	1/4W	
R039	1-246-421-00	CARBON	6.8	5%	1/4W	
R040 ⚠.	1-247-028-00	CARBON	8.2	5%	1/8W	F
R041	1-246-481-00	CARBON	2.2K	5%	1/4W	
R042	1-246-481-00	CARBON	2.2K	5%	1/4W	
R043	1-246-481-00	CARBON	2.2K	5%	1/4W	
R044	1-246-481-00	CARBON	2.2K	5%	1/4W	
R045	1-246-473-00	CARBON	1K	5%	1/4W	
R046	1-246-473-00	CARBON	1K	5%	1/4W	
R047	1-246-467-00	CARBON	560	5%	1/4W	
R048	1-246-475-00	CARBON	1.2K	5%	1/4W	
R049	1-246-491-00	CARBON	5.6K	5%	1/4W	
R050	1-246-497-00	CARBON	10K	5%	1/4W	
R051	1-246-783-00	CARBON	1K	5%	1/8W	
R052	1-246-468-00	CARBON	620	5%	1/4W	
R053	1-246-491-00	CARBON	5.6K	5%	1/4W	
R054	1-246-497-00	CARBON	10K	5%	1/4W	
R055	1-246-481-00	CARBON	2.2K	5%	1/4W	
R056	1-246-451-00	CARBON	120	5%	1/4W	
R057	1-246-489-00	CARBON	4.7K	5%	1/4W	
R058	1-246-509-00	CARBON	33K	5%	1/4W	
R059 ⚠.	1-247-028-00	CARBON	8.2	5%	1/8W	F
R060	1-246-457-00	CARBON	220	5%	1/4W	
R061	1-246-489-00	CARBON	4.7K	5%	1/4W	

VARIABLE RESISTOR

RV001	1-224-642-XX	RES, ADJ, CARBON 1K				
RV002	1-224-644-XX	RES, ADJ, CARBON 3.3K				
RV003	1-224-642-XX	RES, ADJ, CARBON 1K				
RV004	1-224-642-XX	RES, ADJ, CARBON 1K				
RV005	1-224-643-XX	RES, ADJ, CARBON 2.2K				
RV006	1-224-644-XX	RES, ADJ, CARBON 4.7K				

TRANSFORMER

T001	1-427-455-00	TRANSFORMER, I/O PUT				
T002	1-427-455-00	TRANSFORMER, I/O PUT				
T003	1-427-455-00	TRANSFORMER, I/O PUT				

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	●:A-6713-102-A	SA-7 BOARD, COMPLETE	E-603
	●:3-661-687-00	CASE, SHIELD, (B) BOTTOM PLATE	
	●:3-661-688-00	CASE, SHIELD, (A) MAIN	
	●:3-661-689-00	CASE, SHIELD, (A) LID	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked " ● " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref.No	Part No	Description			Remark
	♠:3-661-690-00	CASE, SHIELD, (A) BOTTOM PLATE			
	♠:3-661-691-00	CASE, SHIELD, (B) LID			
	♠:3-661-692-00	CASE, SHIELD, (B) MAIN			
	♠:3-665-842-00	REINFORCEMENT, SA-7 PC BOARD			
	♠:3-701-748-00	CLAMP			
		CAPACITOR			
C001	1-123-316-00	ELECT	10MF	20%	16V
C002	1-108-381-00	MYLAR	0.022MF	10%	100V
C003	1-108-381-00	MYLAR	0.022MF	10%	100V
C004	1-108-385-00	MYLAR	0.047MF	10%	100V
C005	1-102-074-00	CERAMIC	0.001MF	10%	50V
C006	1-101-006-00	CERAMIC	0.047MF		50V
C007	1-131-369-00	TANTALUM	4.7MF	10%	16V
C008	1-131-369-00	TANTALUM	4.7MF	10%	16V
C009	1-161-021-00	CERAMIC	0.047MF	10%	25V
C010	1-131-345-00	TANTALUM	0.47MF	10%	35V
C011	1-130-224-00	FILM	0.015MF	5%	50V
C012	1-101-059-00	CERAMIC	510PF	5%	50V
C013	1-130-224-00	FILM	0.015MF	5%	50V
C014	1-130-224-00	FILM	0.015MF	5%	50V
C015	1-130-023-00	FILM	0.0027MF	5%	50V
C016	1-102-129-00	CERAMIC	0.01MF	10%	50V
C017	1-108-385-00	MYLAR	0.047MF	10%	100V
C018	1-102-824-00	CERAMIC	430PF	5%	50V
C019	1-131-369-00	TANTALUM	4.7MF	10%	16V
C020	1-131-369-00	TANTALUM	4.7MF	10%	16V
C021	1-101-006-00	CERAMIC	0.047MF		50V
C022	1-123-307-00	ELECT	100MF	20%	10V
C024	1-101-006-00	CERAMIC	0.047MF		50V
C025	1-131-369-00	TANTALUM	4.7MF	10%	16V
C026	1-131-369-00	TANTALUM	4.7MF	10%	16V
C027	1-123-328-00	ELECT	4.7MF	20%	25V
C028	1-131-347-00	TANTALUM	1MF	10%	35V
C029	1-101-006-00	CERAMIC	0.047MF		50V
C030	1-131-345-00	TANTALUM	0.47MF	10%	35V
C032	1-161-494-00	CERAMIC	0.022MF	30%	25V
C033	1-123-352-00	ELECT	1MF	20%	50V
C034	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C035	1-102-074-00	CERAMIC	0.001MF	10%	50V
C036	1-123-305-00	ELECT	33MF	20%	10V
C038	1-131-345-00	TANTALUM	0.47MF	10%	35V
C039	1-131-346-00	TANTALUM	0.68MF	10%	35V
C040	1-131-344-00	TANTALUM	0.33MF	10%	35V
C041	1-161-025-00	CERAMIC	0.1MF	10%	25V
C042	1-102-129-00	CERAMIC	0.01MF	10%	50V
C043	1-123-320-00	ELECT	100MF	20%	16V
C044	1-101-006-00	CERAMIC	0.047MF		50V
C045	1-123-351-00	ELECT	0.47MF	20%	50V
C046	1-130-535-00	FILM	0.15MF	5%	50V
C047	1-102-074-00	CERAMIC	0.001MF	10%	50V
C048	1-130-201-00	FILM	0.068MF	5%	50V
C049	1-123-320-00	ELECT	100MF	20%	16V

Ref.No	Part No	Description			Remark
C051	1-123-316-00	ELECT	10MF	20%	16V
C061	1-131-361-00	TANTALUM	2.2MF	10%	20V
C062	1-131-361-00	TANTALUM	2.2MF	10%	20V
C063	1-101-006-00	CERAMIC	0.047MF		50V
C064	1-123-320-00	ELECT	100MF	20%	16V
C065	1-123-317-00	ELECT	22MF	20%	16V
C066	1-131-345-00	TANTALUM	0.47MF	10%	35V
C067	1-123-352-00	ELECT	1MF	20%	50V
C068	1-130-224-00	FILM	0.015MF	5%	50V
C069	1-130-026-00	FILM	0.0047MF	5%	50V
C074	1-123-329-00	ELECT	10MF	20%	25V
C075	1-101-006-00	CERAMIC	0.047MF		50V
C076	1-161-494-00	CERAMIC	0.022MF	30%	25V
C078	1-123-353-00	ELECT	2.2MF	20%	50V
C079	1-123-328-00	ELECT	4.7MF	20%	25V
C080	1-131-361-00	TANTALUM	2.2MF	10%	20V
C082	1-123-317-00	ELECT	22MF	20%	16V
C083	1-123-328-00	ELECT	4.7MF	20%	25V
C084	1-123-316-00	ELECT	10MF	20%	16V
C086	1-123-316-00	ELECT	10MF	20%	16V
C087	1-123-316-00	ELECT	10MF	20%	16V
C088	1-101-006-00	CERAMIC	0.047MF		50V
C089	1-123-316-00	ELECT	10MF	20%	16V
C090	1-101-004-00	CERAMIC	0.01MF		50V
C092	1-123-316-00	ELECT	10MF	20%	16V
C093	1-161-013-00	CERAMIC	0.01MF	10%	25V
C094	1-161-013-00	CERAMIC	0.01MF	10%	25V
C300	1-101-059-00	CERAMIC	510PF	5%	50V
C301	1-102-820-00	CERAMIC	330PF	5%	50V
C302	1-108-555-00	MYLAR	0.001MF	5%	50V
C303	1-123-318-00	ELECT	33MF	20%	16V
C304	1-123-352-00	ELECT	1MF	20%	50V
C306	1-123-295-00	ELECT	100MF	20%	6.3V
C307	1-123-316-00	ELECT	10MF	20%	16V
C308	1-123-319-00	ELECT	47MF	20%	16V
C309	1-102-973-00	CERAMIC	100PF	5%	50V
C310	1-102-074-00	CERAMIC	0.001MF	10%	50V
C311	1-123-316-00	ELECT	10MF	20%	16V
C312	1-123-320-00	ELECT	100MF	20%	16V
C313	1-123-328-00	ELECT	4.7MF	20%	25V
C314	1-123-311-00	ELECT	1000MF	20%	10V
C315	1-108-375-00	MYLAR	0.0068MF	10%	100V
C316	1-108-383-00	MYLAR	0.033MF	10%	100V
C317	1-108-387-00	MYLAR	0.068MF	10%	100V
C318	1-108-365-00	MYLAR	0.001MF	10%	100V
C319	1-108-579-00	MYLAR	0.01MF	5%	50V
C320	1-108-589-00	MYLAR	0.027MF	5%	50V
C321	1-161-013-00	CERAMIC	0.01MF	10%	25V
C322	1-123-352-00	ELECT	1MF	20%	50V
C323	1-108-377-00	MYLAR	0.01MF	10%	100V
C324	1-123-319-00	ELECT	47MF	20%	16V
C325	1-123-319-00	ELECT	47MF	20%	16V
C326	1-102-959-00	CERAMIC	22PF	5%	50V

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref.No	Part No	Description			Remark
C327	1-123-316-00	ELECT	10MF	20%	16V
C328	1-123-316-00	ELECT	10MF	20%	16V
C329	1-108-374-00	MYLAR	0.0056MF	10%	100V
C330	1-123-316-00	ELECT	10MF	20%	16V
C331	1-101-888-00	CERAMIC	68PF	5%	50V
C332	1-123-328-00	ELECT	4.7MF	20%	25V
C333	1-161-007-00	CERAMIC	0.0033MF	10%	25V
C334	1-123-319-00	ELECT	47MF	20%	16V
C335	1-123-320-00	ELECT	100MF	20%	16V
C336	1-123-317-00	ELECT	22MF	20%	16V
C337	1-101-004-00	CERAMIC	0.01MF		50V
C338	1-123-318-00	ELECT	33MF	20%	16V
C339	1-123-316-00	ELECT	10MF	20%	16V
C340	1-102-816-00	CERAMIC	120PF	5%	50V
C341	1-123-316-00	ELECT	10MF	20%	16V
C342	1-108-365-00	MYLAR	0.001MF	10%	100V
C343	1-102-980-00	CERAMIC	270PF	5%	50V
C345	1-108-583-00	MYLAR	0.015MF	5%	50V
C346	1-108-591-00	MYLAR	0.033MF	5%	50V
C347	1-130-062-00	FILM	0.0056MF	10%	630V
C348	1-108-373-00	MYLAR	0.0047MF	10%	100V
C349	1-108-369-00	MYLAR	0.0022MF	10%	100V
C350	1-123-319-00	ELECT	47MF	20%	16V
C351	1-123-320-00	ELECT	100MF	20%	16V
C352	1-102-973-00	CERAMIC	100PF	5%	50V
C400	1-123-354-00	ELECT	3.3MF	20%	50V
C401	1-161-021-00	CERAMIC	0.047MF	10%	25V
C402	1-123-319-00	ELECT	47MF	20%	16V
C403	1-123-319-00	ELECT	47MF	20%	16V
C502	1-131-346-00	TANTALUM	0.68MF	10%	35V
C503	1-101-006-00	CERAMIC	0.047MF		50V
C504	1-102-129-00	CERAMIC	0.01MF	10%	50V
C505	1-131-346-00	TANTALUM	0.68MF	10%	35V
C506	1-101-006-00	CERAMIC	0.047MF		50V
C507	1-131-346-00	TANTALUM	0.68MF	10%	35V
C508	1-101-006-00	CERAMIC	0.047MF		50V
C509	1-123-328-00	ELECT	4.7MF	20%	25V
C510	1-123-316-00	ELECT	10MF	20%	16V
C511	1-108-387-00	MYLAR	0.068MF	10%	100V
C512	1-161-021-00	CERAMIC	0.047MF	10%	25V
C514	1-131-346-00	TANTALUM	0.68MF	10%	35V
C516	1-131-346-00	TANTALUM	0.68MF	10%	35V
C517	1-161-021-00	CERAMIC	0.047MF	10%	25V
C518	1-123-320-00	ELECT	100MF	20%	16V
C519	1-102-973-00	CERAMIC	100PF	5%	50V
C520	1-101-004-00	CERAMIC	0.01MF		50V
C521	1-161-013-00	CERAMIC	0.01MF	10%	25V
C522	1-123-316-00	ELECT	10MF	20%	16V
C523	1-101-004-00	CERAMIC	0.01MF		50V
C524	1-101-004-00	CERAMIC	0.01MF		50V
C525	1-101-004-00	CERAMIC	0.01MF		50V
C526	1-101-004-00	CERAMIC	0.01MF		50V
C527	1-101-004-00	CERAMIC	0.01MF		50V

Ref.No	Part No	Description			Remark
C528	1-101-006-00	CERAMIC	0.047MF		50V
C529	1-101-004-00	CERAMIC	0.01MF		50V
C530	1-102-129-00	CERAMIC	0.01MF	10%	50V
C531	1-161-013-00	CERAMIC	0.01MF	10%	25V
C601	1-130-048-00	FILM	220PF	5%	50V
C602	1-130-014-00	FILM	470PF	5%	50V
C603	1-102-973-00	CERAMIC	100PF	5%	50V
C604	1-102-978-00	CERAMIC	220PF	5%	50V
C605	1-101-059-00	CERAMIC	510PF	5%	50V
C606	1-102-973-00	CERAMIC	100PF	5%	50V
C607	1-123-319-00	ELECT	47MF	20%	16V
C608	1-102-973-00	CERAMIC	100PF	5%	50V
C609	1-130-018-00	FILM	0.001MF	5%	50V
C610	1-108-365-00	MYLAR	0.001MF	10%	100V
C611	1-131-361-00	TANTALUM	2.2MF	10%	20V
C612	1-131-361-00	TANTALUM	2.2MF	10%	20V
C701	1-123-320-00	ELECT	100MF	20%	16V
C702	1-131-341-00	TANTALUM	0.1MF	10%	35V
C703	1-123-317-00	ELECT	22MF	20%	16V
C704	1-123-316-00	ELECT	10MF	20%	16V
C705	1-123-320-00	ELECT	100MF	20%	16V
C706	1-123-307-00	ELECT	100MF	20%	10V
C707	1-102-973-00	CERAMIC	100PF	5%	50V
C708	1-161-271-00	CERAMIC	100PF	5%	50V
C709	1-123-320-00	ELECT	100MF	20%	16V
C710	1-161-016-00	CERAMIC	0.018MF	10%	25V
C711	1-123-316-00	ELECT	10MF	20%	16V
C712	1-102-129-00	CERAMIC	0.01MF	10%	50V
C713	1-102-963-00	CERAMIC	33PF	5%	50V
C714	1-123-298-00	ELECT	470MF	20%	6.3V
C715	1-123-316-00	ELECT	10MF	20%	16V
C716	1-123-296-00	ELECT	220MF	20%	6.3V
C717	1-123-319-00	ELECT	47MF	20%	16V
C718	1-161-017-00	CERAMIC	0.022MF	10%	25V
C719	1-161-017-00	CERAMIC	0.022MF	10%	25V
C720	1-131-343-00	TANTALUM	0.22MF	10%	35V
C721	1-161-323-00	CERAMIC	0.001MF	10%	50V
C722	1-161-021-00	CERAMIC	0.047MF	10%	25V
C723	1-131-341-00	TANTALUM	0.1MF	10%	35V
C724	1-123-317-00	ELECT	22MF	20%	16V

CONNECTOR

CN001🌢:1-508-849-00 PIN, CONNECTOR 8P
CN002🌢:1-508-846-00 PIN, CONNECTOR 8P
CN003🌢:1-508-846-00 PIN, CONNECTOR 8P
CN004🌢:1-508-744-00 PIN, CONNECTOR 10P
CN005🌢:1-508-742-00 PIN, CONNECTOR 3P

CN006🌢:1-508-742-00 PIN, CONNECTOR 3P
CN007🌢:1-508-742-00 PIN, CONNECTOR 3P
CN008🌢:1-508-846-00 PIN, CONNECTOR 8P
CN009🌢:1-508-742-00 PIN, CONNECTOR 3P

- Items marked " 🌢 " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

COMPOSITION

Ref.No	Part No	Description	Remark
CP001	1-231-893-00	COMPOSITION CIRCUIT BLOCK	
CP002	1-231-965-00	COMPOSITION CIRCUIT BLOCK	
CP003	1-231-909-00	COMPOSITION CIRCUIT BLOCK	
CP004	1-231-894-00	COMPOSITION CIRCUIT BLOCK	
CP005	1-231-910-00	COMPOSITION CIRCUIT BLOCK	
CP006	1-231-914-00	COMPOSITION CIRCUIT BLOCK	
CP007	1-231-911-00	COMPOSITION CIRCUIT BLOCK	
CP008	1-231-907-00	COMPOSITION CIRCUIT BLOCK	
CP009	1-231-907-00	COMPOSITION CIRCUIT BLOCK	
CP010	1-231-912-00	COMPOSITION CIRCUIT BLOCK	
CP011	1-231-913-00	COMPOSITION CIRCUIT BLOCK	
CP012	1-231-948-00	COMPOSITION CIRCUIT BLOCK	
CP013	1-231-949-00	COMPOSITION CIRCUIT BLOCK	
CP015	1-231-914-00	COMPOSITION CIRCUIT BLOCK	
CP016	1-231-915-00	COMPOSITION CIRCUIT BLOCK	
CP017	1-231-895-00	COMPOSITION CIRCUIT BLOCK	
CP018	1-231-896-00	COMPOSITION CIRCUIT BLOCK	
CP019	1-231-897-00	COMPOSITION CIRCUIT BLOCK	
CP020	1-231-907-00	COMPOSITION CIRCUIT BLOCK	
CP021	1-231-897-00	COMPOSITION CIRCUIT BLOCK	
CP022	1-231-916-00	COMPOSITION CIRCUIT BLOCK	
CP023	1-231-771-00	COMPOSITION CIRCUIT BLOCK	
CP024	1-231-917-00	COMPOSITION CIRCUIT BLOCK	
CP025	1-231-951-00	COMPOSITION CIRCUIT BLOCK	
CP026	1-231-918-00	COMPOSITION CIRCUIT BLOCK	
CP027	1-231-919-00	COMPOSITION CIRCUIT BLOCK	
CP028	1-231-898-00	COMPOSITION CIRCUIT BLOCK	
CP029	1-231-907-00	COMPOSITION CIRCUIT BLOCK	
CP030	1-231-899-00	COMPOSITION CIRCUIT BLOCK	
CP031	1-231-900-00	COMPOSITION CIRCUIT BLOCK	
CP032	1-231-920-00	COMPOSITION CIRCUIT BLOCK	
CP033	1-231-966-00	COMPOSITION CIRCUIT BLOCK	
CP034	1-231-921-00	COMPOSITION CIRCUIT BLOCK	
CP035	1-231-901-00	COMPOSITION CIRCUIT BLOCK	
CP036	1-231-952-00	COMPOSITION CIRCUIT BLOCK	
CP037	1-231-902-00	COMPOSITION CIRCUIT BLOCK	
CP038	1-231-922-00	COMPOSITION CIRCUIT BLOCK	
CP039	1-231-923-00	COMPOSITION CIRCUIT BLOCK	
CP040	1-231-810-00	COMPOSITION CIRCUIT BLOCK	
CP041	1-231-771-00	COMPOSITION CIRCUIT BLOCK	
CP042	1-231-903-00	COMPOSITION CIRCUIT BLOCK	
CP043	1-231-810-00	COMPOSITION CIRCUIT BLOCK	
CP044	1-231-904-00	COMPOSITION CIRCUIT BLOCK	
CP045	1-231-967-00	COMPOSITION CIRCUIT BLOCK	
CP046	1-231-924-00	COMPOSITION CIRCUIT BLOCK	
CP047	1-231-972-00	COMPOSITION CIRCUIT BLOCK	
CP048	1-231-905-00	COMPOSITION CIRCUIT BLOCK	
CP049	1-231-968-00	COMPOSITION CIRCUIT BLOCK	
CP050	1-231-925-00	COMPOSITION CIRCUIT BLOCK	
CP051	1-231-926-00	COMPOSITION CIRCUIT BLOCK	
CP052	1-231-969-00	COMPOSITION CIRCUIT BLOCK	

Ref.No	Part No	Description	Remark
CP053	1-231-927-00	COMPOSITION CIRCUIT BLOCK	
CP054	1-231-953-00	COMPOSITION CIRCUIT BLOCK	
CP055	1-231-928-00	COMPOSITION CIRCUIT BLOCK	
CP056	1-231-929-00	COMPOSITION CIRCUIT BLOCK	
CP057	1-231-954-00	COMPOSITION CIRCUIT BLOCK	
CP058	1-231-955-00	COMPOSITION CIRCUIT BLOCK	
CP059	1-231-930-00	COMPOSITION CIRCUIT BLOCK	
CP060	1-231-931-00	COMPOSITION CIRCUIT BLOCK	
CP061	1-231-932-00	COMPOSITION CIRCUIT BLOCK	
CP062	1-231-933-00	COMPOSITION CIRCUIT BLOCK	
CP063	1-231-956-00	COMPOSITION CIRCUIT BLOCK	
CP064	1-231-906-00	COMPOSITION CIRCUIT BLOCK	
CP065	1-231-980-00	COMPOSITION CIRCUIT BLOCK	
CP066	1-231-981-00	COMPOSITION CIRCUIT BLOCK	
CP067	1-231-982-00	COMPOSITION CIRCUIT BLOCK	
CP068	1-231-983-00	COMPOSITION CIRCUIT BLOCK	
CP069	1-231-922-00	COMPOSITION CIRCUIT BLOCK	

TRIMMER

Ref.No	Part No	Description	Remark
CV001	1-141-215-00	CAP, TRIMMER	

DIODE

Ref.No	Part No	Description	Remark
D003	8-719-815-55	DIODE 1S1555	
D004	8-719-815-55	DIODE 1S1555	
D005	8-719-162-07	DIODE RD6.2E-B	
D012	8-719-815-55	DIODE 1S1555	
D013	8-719-815-55	DIODE 1S1555	
D014	8-719-815-55	DIODE 1S1555	
D015	8-719-815-55	DIODE 1S1555	
D016	8-719-815-55	DIODE 1S1555	
D017	8-719-815-55	DIODE 1S1555	
D018	8-719-815-55	DIODE 1S1555	
D019	8-719-815-55	DIODE 1S1555	
D021	8-719-815-55	DIODE 1S1555	
D022	8-719-815-55	DIODE 1S1555	
D026	8-719-815-55	DIODE 1S1555	
D028	8-719-815-55	DIODE 1S1555	
D030	8-719-815-55	DIODE 1S1555	
D031	8-719-815-55	DIODE 1S1555	
D032	8-719-815-55	DIODE 1S1555	
D033	8-719-113-07	DIODE RD13E-B	
D061	8-719-815-80	DIODE 1S1587	
D062	8-719-815-55	DIODE 1S1555	
D063	8-719-815-55	DIODE 1S1555	
D064	8-719-815-55	DIODE 1S1555	
D065	8-719-815-55	DIODE 1S1555	
D066	8-719-815-55	DIODE 1S1555	
D067	8-719-815-55	DIODE 1S1555	
D069	8-719-815-55	DIODE 1S1555	
D070	8-719-815-55	DIODE 1S1555	
D100	8-719-815-55	DIODE 1S1555	
D102	8-719-815-55	DIODE 1S1555	

Ref.No	Part No	Description	Remark
D103	8-719-815-55	DIODE 1S1555	
D104	8-719-200-02	DIODE 10E-2	
D106	8-719-815-55	DIODE 1S1555	
D107	8-719-815-55	DIODE 1S1555	
D108	8-719-815-55	DIODE 1S1555	
D109	8-719-113-26	DIODE RD13E-B3Z	
D110	8-719-113-26	DIODE RD13E-B3Z	
D111	8-719-113-26	DIODE RD13E-B3Z	
D510	8-719-200-02	DIODE 10E-2	
D511	8-719-200-02	DIODE 10E-2	
D516	8-719-815-55	DIODE 1S1555	
D518	8-719-815-55	DIODE 1S1555	
D524	8-719-815-55	DIODE 1S1555	
D601	8-719-815-55	DIODE 1S1555	
D602	8-719-815-55	DIODE 1S1555	
D603	8-719-815-55	DIODE 1S1555	
D605	8-719-815-55	DIODE 1S1555	
D701	8-719-815-55	DIODE 1S1555	
D704	8-719-815-55	DIODE 1S1555	
D705	8-719-815-55	DIODE 1S1555	
D706	8-719-815-55	DIODE 1S1555	
D707	8-719-815-55	DIODE 1S1555	
D708	8-719-815-55	DIODE 1S1555	
D711	8-719-815-55	DIODE 1S1555	

IC

Ref.No	Part No	Description	Remark
IC001	8-751-860-00	IC CX-186	
IC002	8-751-430-00	IC CX-143A	
IC004	8-759-240-11	IC TC4011BP	
IC005	8-759-240-27	IC TC4027BP	
IC501	8-759-618-48	IC M51848L	
IC502	8-759-618-48	IC M51848L	
IC503	8-759-618-48	IC M51848L	
IC504	8-759-618-48	IC M51848L	
IC505	8-759-618-48	IC M51848L	
IC506	8-759-240-13	IC TC4013BP	
IC507	8-759-618-48	IC M51848L	
IC601	8-759-145-58	IC UPC4558C	
IC701	8-759-271-20	IC TA7120P	
IC702	8-759-240-11	IC TC4011BP	

COIL

Ref.No	Part No	Description	Remark
L001	1-407-157-XX	MICRO INDUCTOR 10UH	
L061	1-407-718-00	MICRO INDUCTOR 1.2MMH	
L062	1-407-506-00	MICRO INDUCTOR 15MMH	
L063	1-407-506-00	MICRO INDUCTOR 15MMH	
L064	1-407-195-XX	MICRO INDUCTOR 15MMH	

VARIABLE COIL

Ref.No	Part No	Description	Remark
LV061	1-407-286-00	MICRO INDUCTOR 2.2MMH	
LV062	1-407-240-00	MICRO INDUCTOR 22MMH	

TRANSISTOR

Ref.No	Part No	Description	Remark
Q001	8-729-117-54	TRANSISTOR 2SA1175	
Q002 ⚠	8-729-117-54	TRANSISTOR 2SA1175	
Q003	8-729-178-54	TRANSISTOR 2SC2785	
Q004	8-729-178-54	TRANSISTOR 2SC2785	
Q005	8-729-117-54	TRANSISTOR 2SA1175	
Q006	8-729-178-54	TRANSISTOR 2SC2785	
Q007	8-729-117-54	TRANSISTOR 2SA1175	
Q008	8-729-178-54	TRANSISTOR 2SC2785	
Q010	8-729-178-54	TRANSISTOR 2SC2785	
Q011	8-729-178-54	TRANSISTOR 2SC2785	
Q012	8-729-117-54	TRANSISTOR 2SA1175	
Q013	8-729-117-54	TRANSISTOR 2SA1175	
Q016	8-729-178-54	TRANSISTOR 2SC2785	
Q017	8-729-178-54	TRANSISTOR 2SC2785	
Q018	8-729-178-54	TRANSISTOR 2SC2785	
Q019	8-729-178-54	TRANSISTOR 2SC2785	
Q020	8-729-178-54	TRANSISTOR 2SC2785	
Q021	8-729-178-54	TRANSISTOR 2SC2785	
Q024	8-729-178-54	TRANSISTOR 2SC2785	
Q025	8-729-178-54	TRANSISTOR 2SC2785	
Q026	8-729-178-54	TRANSISTOR 2SC2785	
Q027	8-729-178-54	TRANSISTOR 2SC2785	
Q028	8-729-178-54	TRANSISTOR 2SC2785	
Q029	8-729-178-54	TRANSISTOR 2SC2785	
Q030	8-729-178-54	TRANSISTOR 2SC2785	
Q031	8-729-117-54	TRANSISTOR 2SA1175	
Q032	8-729-178-54	TRANSISTOR 2SC2785	
Q033	8-729-178-54	TRANSISTOR 2SC2785	
Q034	8-729-178-54	TRANSISTOR 2SC2785	
Q035	8-729-178-54	TRANSISTOR 2SC2785	
Q036	8-729-178-54	TRANSISTOR 2SC2785	
Q038	8-729-178-54	TRANSISTOR 2SC2785	
Q039	8-729-178-54	TRANSISTOR 2SC2785	
Q040	8-729-178-54	TRANSISTOR 2SC2785	
Q041	8-729-993-72	TRANSISTOR 2SA937	
Q042	8-729-178-54	TRANSISTOR 2SC2785	
Q043	8-729-178-54	TRANSISTOR 2SC2785	
Q044	8-729-178-54	TRANSISTOR 2SC2785	
Q045	8-729-178-54	TRANSISTOR 2SC2785	
Q046	8-729-178-54	TRANSISTOR 2SC2785	
Q047	8-729-117-54	TRANSISTOR 2SA1175	
Q049	8-729-178-54	TRANSISTOR 2SC2785	
Q050	8-729-178-54	TRANSISTOR 2SC2785	
Q053	8-729-178-54	TRANSISTOR 2SC2785	
Q054	8-729-178-54	TRANSISTOR 2SC2785	
Q055	8-729-117-54	TRANSISTOR 2SA1175	
Q056	8-729-178-54	TRANSISTOR 2SC2785	
Q057	8-729-178-54	TRANSISTOR 2SC2785	
Q058	8-729-178-54	TRANSISTOR 2SC2785	
Q059	8-729-178-54	TRANSISTOR 2SC2785	
Q061	8-729-663-47	TRANSISTOR 2SC1364	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No	Part No	Description	Remark
Q062	8-729-665-47	TRANSISTOR 2SC1362	
Q063	8-729-665-47	TRANSISTOR 2SC1362	
Q064	=>8-729-663-47	TRANSISTOR 2SC1364	
Q065	8-729-663-47	TRANSISTOR 2SC1364	
Q066	8-729-663-47	TRANSISTOR 2SC1364	
Q067	8-729-663-47	TRANSISTOR 2SC1364	
Q068	8-729-665-47	TRANSISTOR 2SC1362	
Q069	8-729-663-47	TRANSISTOR 2SC1364	
Q070	8-729-663-47	TRANSISTOR 2SC1364	
Q071	8-729-663-47	TRANSISTOR 2SC1364	
Q072	8-729-113-32	TRANSISTOR 2SB733	
Q073	8-729-663-47	TRANSISTOR 2SC1364	
Q074	8-729-663-47	TRANSISTOR 2SC1364	
Q075	8-729-663-47	TRANSISTOR 2SC1364	
Q076	8-729-177-43	TRANSISTOR 2SD774	
Q078	8-729-117-54	TRANSISTOR 2SA1175	
Q079	8-729-117-54	TRANSISTOR 2SA1175	
Q100	8-729-178-54	TRANSISTOR 2SC2785	
Q101	8-729-178-54	TRANSISTOR 2SC2785	
Q102	8-729-178-54	TRANSISTOR 2SC2785	
Q103⚠	8-729-117-54	TRANSISTOR 2SA1175	
Q104	8-729-178-54	TRANSISTOR 2SC2785	
Q105⚠	8-729-316-16	TRANSISTOR 2SC1061	
Q106⚠	8-763-113-00	TRANSISTOR 2SC1761	
Q501	8-729-178-54	TRANSISTOR 2SC2785	
Q502	8-729-178-54	TRANSISTOR 2SC2785	
Q503	8-729-178-54	TRANSISTOR 2SC2785	
Q504	8-729-178-54	TRANSISTOR 2SC2785	
Q505	8-729-178-54	TRANSISTOR 2SC2785	
Q506	8-729-178-54	TRANSISTOR 2SC2785	
Q507	8-729-178-54	TRANSISTOR 2SC2785	
Q508	8-729-178-54	TRANSISTOR 2SC2785	
Q509	8-729-117-54	TRANSISTOR 2SA1175	
Q511	8-729-178-54	TRANSISTOR 2SC2785	
Q512	8-729-178-54	TRANSISTOR 2SC2785	
Q513	8-729-178-54	TRANSISTOR 2SC2785	
Q514	8-729-178-54	TRANSISTOR 2SC2785	
Q515	8-729-178-54	TRANSISTOR 2SC2785	
Q516	8-729-905-52	TRANSISTOR 2SD1055	
Q517	8-729-905-52	TRANSISTOR 2SD1055	
Q518	8-729-178-54	TRANSISTOR 2SC2785	
Q519	8-729-178-54	TRANSISTOR 2SC2785	
Q520	8-729-178-54	TRANSISTOR 2SC2785	
Q521	8-729-178-54	TRANSISTOR 2SC2785	
Q522	8-729-117-54	TRANSISTOR 2SA1175	
Q523	8-729-178-54	TRANSISTOR 2SC2785	
Q524	8-729-178-54	TRANSISTOR 2SC2785	
Q525	8-729-178-54	TRANSISTOR 2SC2785	
Q526	8-729-198-52	TRANSISTOR 2SD985	
Q527	8-729-198-52	TRANSISTOR 2SD985	
Q528	8-729-178-54	TRANSISTOR 2SC2785	
Q529	8-729-117-54	TRANSISTOR 2SA1175	
Q601	8-729-178-54	TRANSISTOR 2SC2785	

Ref.No	Part No	Description	Remark
Q602	8-729-178-54	TRANSISTOR 2SC2785	
Q603	8-729-178-54	TRANSISTOR 2SC2785	
Q604	8-729-178-54	TRANSISTOR 2SC2785	
Q605	8-729-178-54	TRANSISTOR 2SC2785	
Q606	8-729-178-54	TRANSISTOR 2SC2785	
Q607	8-729-178-54	TRANSISTOR 2SC2785	
Q608	8-729-117-54	TRANSISTOR 2SA1175	
Q609	8-729-178-54	TRANSISTOR 2SC2785	
Q610	8-729-178-54	TRANSISTOR 2SC2785	
Q611	8-729-117-54	TRANSISTOR 2SA1175	
Q612	8-729-117-54	TRANSISTOR 2SA1175	
Q613	8-729-178-54	TRANSISTOR 2SC2785	
Q614	8-729-178-54	TRANSISTOR 2SC2785	
Q615	8-729-178-54	TRANSISTOR 2SC2785	
Q616	8-729-178-54	TRANSISTOR 2SC2785	
Q617	8-729-178-54	TRANSISTOR 2SC2785	
Q701	8-729-117-54	TRANSISTOR 2SA1175	
Q702	8-729-178-54	TRANSISTOR 2SC2785	
Q703	8-729-117-54	TRANSISTOR 2SA1175	
Q704	8-729-178-54	TRANSISTOR 2SC2785	
Q705	8-729-178-54	TRANSISTOR 2SC2785	
Q706	8-729-178-54	TRANSISTOR 2SC2785	
Q707	8-729-178-54	TRANSISTOR 2SC2785	
Q708	8-729-178-54	TRANSISTOR 2SC2785	
Q709	8-729-178-54	TRANSISTOR 2SC2785	
Q710	8-729-178-54	TRANSISTOR 2SC2785	
Q711	8-729-117-54	TRANSISTOR 2SA1175	
Q712	8-729-178-54	TRANSISTOR 2SC2785	
Q713	8-729-178-54	TRANSISTOR 2SC2785	
Q714	8-729-117-54	TRANSISTOR 2SA1175	
Q715	8-729-178-54	TRANSISTOR 2SC2785	
Q716	8-729-178-54	TRANSISTOR 2SC2785	
		RESISTOR	
R001	1-246-497-00	CARBON 10K 5% 1/4W	
R009	1-202-472-00	COMPOSITION 5.1M 5% 1/4W	
R011	1-246-513-00	CARBON 47K 5% 1/4W	
R012	1-246-513-00	CARBON 47K 5% 1/4W	
R013	1-246-513-00	CARBON 47K 5% 1/4W	
R014	1-214-156-00	METAL 10K 1% 1/4W	
R017	1-246-493-00	CARBON 6.8K 5% 1/4W	
R019	1-246-538-00	CARBON 510K 5% 1/4W	
R020	1-246-539-00	CARBON 560K 5% 1/4W	
R021	1-246-517-00	CARBON 68K 5% 1/4W	
R031	1-246-509-00	CARBON 33K 5% 1/4W	
R032	1-246-509-00	CARBON 33K 5% 1/4W	
R033	1-246-442-00	CARBON 51 5% 1/4W	
R034	1-246-496-00	CARBON 9.1K 5% 1/4W	
R035	1-246-490-00	CARBON 5.1K 5% 1/4W	
R037	1-214-176-00	METAL 68K 1% 1/4W	
R039	1-214-177-00	METAL 75K 1% 1/4W	
R045	1-246-485-00	CARBON 3.3K 5% 1/4W	
R046	1-246-532-00	CARBON 300K 5% 1/4W	

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No	Part No	Description				Remark
R047	1-214-168-00	METAL	33K	1%	1/4W	
R048	1-246-473-00	CARBON	1K	5%	1/4W	
R049	1-214-166-00	METAL	27K	1%	1/4W	
R058	1-246-473-00	CARBON	1K	5%	1/4W	
R062	1-246-489-00	CARBON	4.7K	5%	1/4W	
R063	1-246-518-00	CARBON	75K	5%	1/4W	
R064	1-246-509-00	CARBON	33K	5%	1/4W	
R066	1-246-505-00	CARBON	22K	5%	1/4W	
R073	1-202-472-00	COMPOSITION	5.1M	5%	1/4W	
R074	1-246-459-00	CARBON	270	5%	1/4W	
R075	1-246-485-00	CARBON	3.3K	5%	1/4W	
R076	1-214-170-00	METAL	39K	1%	1/4W	
R077	1-214-172-00	METAL	47K	1%	1/4W	
R079	1-246-495-00	CARBON	8.2K	5%	1/4W	
R083	1-246-513-00	CARBON	47K	5%	1/4W	
R095	1-246-514-00	CARBON	51K	5%	1/4W	
R102	1-246-489-00	CARBON	4.7K	5%	1/4W	
R103	1-214-176-00	METAL	68K	1%	1/4W	
R104	1-246-521-00	CARBON	100K	5%	1/4W	
R105	1-246-521-00	CARBON	100K	5%	1/4W	
R110	1-214-173-00	METAL	51K	1%	1/4W	
R111	1-246-513-00	CARBON	47K	5%	1/4W	
R114	1-246-513-00	CARBON	47K	5%	1/4W	
R116	1-246-521-00	CARBON	100K	5%	1/4W	
R118	1-246-513-00	CARBON	47K	5%	1/4W	
R120	1-246-505-00	CARBON	22K	5%	1/4W	
R123	1-246-495-00	CARBON	8.2K	5%	1/4W	
R124	1-246-520-00	CARBON	91K	5%	1/4W	
R131	1-246-507-00	CARBON	27K	5%	1/4W	
R137	1-246-509-00	CARBON	33K	5%	1/4W	
R139	1-246-521-00	CARBON	100K	5%	1/4W	
R140	1-246-489-00	CARBON	4.7K	5%	1/4W	
R141	1-246-521-00	CARBON	100K	5%	1/4W	
R142	1-246-497-00	CARBON	10K	5%	1/4W	
R143	1-246-497-00	CARBON	10K	5%	1/4W	
R147	1-246-505-00	CARBON	22K	5%	1/4W	
R149	1-246-497-00	CARBON	10K	5%	1/4W	
R153	1-246-497-00	CARBON	10K	5%	1/4W	
R156	1-246-507-00	CARBON	27K	5%	1/4W	
R160	1-246-505-00	CARBON	22K	5%	1/4W	
R170	1-246-493-00	CARBON	6.8K	5%	1/4W	
R171	1-246-493-00	CARBON	6.8K	5%	1/4W	
R172	1-246-477-00	CARBON	1.5K	5%	1/4W	
R173	1-246-497-00	CARBON	10K	5%	1/4W	
R174	1-214-150-00	METAL	5.6K	1%	1/4W	
R175	1-246-481-00	CARBON	2.2K	5%	1/4W	
R185	1-214-158-00	METAL	12K	1%	1/4W	
R186	1-214-160-00	METAL	15K	1%	1/4W	
R187	1-246-515-00	CARBON	56K	5%	1/4W	
R189	1-246-499-00	CARBON	12K	5%	1/4W	
R191	1-246-489-00	CARBON	4.7K	5%	1/4W	
R192	1-246-497-00	CARBON	10K	5%	1/4W	
R193	1-246-516-00	CARBON	62K	5%	1/4W	

Ref.No	Part No	Description				Remark
R194	1-246-513-00	CARBON	47K	5%	1/4W	
R196	1-246-513-00	CARBON	47K	5%	1/4W	
R197	1-246-515-00	CARBON	56K	5%	1/4W	
R198	1-246-513-00	CARBON	47K	5%	1/4W	
R207	1-246-505-00	CARBON	22K	5%	1/4W	
R210	1-246-789-00	CARBON	3.3K	5%	1/8W	
R211	1-246-513-00	CARBON	47K	5%	1/4W	
R214	1-246-494-00	CARBON	7.5K	5%	1/4W	
R215	1-246-521-00	CARBON	100K	5%	1/4W	
R224	1-246-521-00	CARBON	100K	5%	1/4W	
R225	1-246-521-00	CARBON	100K	5%	1/4W	
R226	1-246-495-00	CARBON	8.2K	5%	1/4W	
R227	1-246-521-00	CARBON	100K	5%	1/4W	
R228	1-214-149-00	METAL	5.1K	1%	1/4W	
R229	1-246-521-00	CARBON	100K	5%	1/4W	
R250	1-246-489-00	CARBON	4.7K	5%	1/4W	
R251	1-246-508-00	CARBON	30K	5%	1/4W	
R252	1-246-807-00	CARBON	100K	5%	1/8W	
R253	1-246-497-00	CARBON	10K	5%	1/4W	
R301	1-246-792-00	CARBON	5.6K	5%	1/8W	
R302	1-246-509-00	CARBON	33K	5%	1/4W	
R303	1-246-425-00	CARBON	10	5%	1/4W	
R305	1-246-545-00	CARBON	1M	5%	1/4W	
R307	1-246-443-00	CARBON	56	5%	1/4W	
R308	1-246-521-00	CARBON	100K	5%	1/4W	
R309	1-246-519-00	CARBON	82K	5%	1/4W	
R311	1-246-486-00	CARBON	3.6K	5%	1/4W	
R312	1-246-521-00	CARBON	100K	5%	1/4W	
R313	1-246-481-00	CARBON	2.2K	5%	1/4W	
R314	1-246-497-00	CARBON	10K	5%	1/4W	
R316	1-246-511-00	CARBON	39K	5%	1/4W	
R320	1-246-795-00	CARBON	10K	5%	1/8W	
R321	1-246-800-00	CARBON	27K	5%	1/8W	
R322	1-246-789-00	CARBON	3.3K	5%	1/8W	
R323	1-246-509-00	CARBON	33K	5%	1/4W	
R324	1-246-509-00	CARBON	33K	5%	1/4W	
R325	1-246-502-00	CARBON	16K	5%	1/4W	
R326	1-246-845-00	CARBON	1.3K	5%	1/8W	
R327	1-246-456-00	CARBON	200	5%	1/4W	
R328	1-246-488-00	CARBON	4.3K	5%	1/4W	
R329	1-246-473-00	CARBON	1K	5%	1/4W	
R331	1-246-525-00	CARBON	150K	5%	1/4W	
R332	1-246-541-00	CARBON	680K	5%	1/4W	
R333	1-246-513-00	CARBON	47K	5%	1/4W	
R334	1-246-495-00	CARBON	8.2K	5%	1/4W	
R335	1-246-471-00	CARBON	820	5%	1/4W	
R336	1-246-517-00	CARBON	68K	5%	1/4W	
R337	1-246-477-00	CARBON	1.5K	5%	1/4W	
R338	1-246-472-00	CARBON	910	5%	1/4W	
R339	1-246-497-00	CARBON	10K	5%	1/4W	
R340	1-246-509-00	CARBON	33K	5%	1/4W	
R341	1-246-475-00	CARBON	1.2K	5%	1/4W	
R342	1-246-787-00	CARBON	2.2K	5%	1/8W	

Ref.No	Part No	Description				Remark
R343	1-246-481-00	CARBON	2.2K	5%	1/4W	
R344	1-246-472-00	CARBON	910	5%	1/4W	
R345	1-246-505-00	CARBON	22K	5%	1/4W	
R346	1-246-483-00	CARBON	2.7K	5%	1/4W	
R347	1-246-485-00	CARBON	3.3K	5%	1/4W	
R348	1-246-443-00	CARBON	56	5%	1/4W	
R355	1-246-463-00	CARBON	390	5%	1/4W	
R356	1-246-801-00	CARBON	33K	5%	1/8W	
R357	1-246-497-00	CARBON	10K	5%	1/4W	
R359	1-246-463-00	CARBON	390	5%	1/4W	
R360	1-246-501-00	CARBON	15K	5%	1/4W	
R361 ⚠.	1-246-981-00	CARBON	4.7	5%	1/8W	F
R362	1-246-509-00	CARBON	33K	5%	1/4W	
R363	1-246-789-00	CARBON	3.3K	5%	1/8W	
R364	1-246-801-00	CARBON	33K	5%	1/8W	
R365	1-246-801-00	CARBON	33K	5%	1/8W	
R370	1-246-457-00	CARBON	220	5%	1/4W	
R400	1-246-485-00	CARBON	3.3K	5%	1/4W	
R403	1-246-497-00	CARBON	10K	5%	1/4W	
R404	1-246-513-00	CARBON	47K	5%	1/4W	
R405	1-246-529-00	CARBON	220K	5%	1/4W	
R408	1-246-513-00	CARBON	47K	5%	1/4W	
R409	1-246-465-00	CARBON	470	5%	1/4W	
R410	1-246-465-00	CARBON	470	5%	1/4W	
R411	1-246-497-00	CARBON	10K	5%	1/4W	
R412 ⚠.	1-212-356-00	METAL	0.47	5%	1W	F
R413	1-246-513-00	CARBON	47K	5%	1/4W	
R415	1-246-521-00	CARBON	100K	5%	1/4W	
R416	1-246-425-00	CARBON	10	5%	1/4W	
R417	1-246-449-00	CARBON	100	5%	1/4W	
R418 ⚠.	1-246-981-00	CARBON	4.7	5%	1/8W	F
R501	1-246-521-00	CARBON	100K	5%	1/4W	
R502	1-246-513-00	CARBON	47K	5%	1/4W	
R503	1-246-497-00	CARBON	10K	5%	1/4W	
R504	1-246-497-00	CARBON	10K	5%	1/4W	
R506	1-246-497-00	CARBON	10K	5%	1/4W	
R507	1-246-513-00	CARBON	47K	5%	1/4W	
R508	1-246-497-00	CARBON	10K	5%	1/4W	
R509	1-246-513-00	CARBON	47K	5%	1/4W	
R510	1-246-783-00	CARBON	1K	5%	1/8W	
R515	1-246-513-00	CARBON	47K	5%	1/4W	
R516	1-246-513-00	CARBON	47K	5%	1/4W	
R517	1-246-521-00	CARBON	100K	5%	1/4W	
R518	1-246-497-00	CARBON	10K	5%	1/4W	
R519	1-246-513-00	CARBON	47K	5%	1/4W	
R520	1-246-516-00	CARBON	62K	5%	1/4W	
R523	1-246-513-00	CARBON	47K	5%	1/4W	
R526	1-246-509-00	CARBON	33K	5%	1/4W	
R527	1-246-515-00	CARBON	56K	5%	1/4W	
R528	1-246-507-00	CARBON	27K	5%	1/4W	
R531	1-246-505-00	CARBON	22K	5%	1/4W	
R538	1-246-497-00	CARBON	10K	5%	1/4W	
R541	1-246-473-00	CARBON	1K	5%	1/4W	

Ref.No	Part No	Description				Remark
R542	1-246-473-00	CARBON	1K	5%	1/4W	
R544	1-246-497-00	CARBON	10K	5%	1/4W	
R545	1-246-783-00	CARBON	1K	5%	1/8W	
R546	1-246-485-00	CARBON	3.3K	5%	1/4W	
R548	1-246-473-00	CARBON	1K	5%	1/4W	
R557	1-246-473-00	CARBON	1K	5%	1/4W	
R558	1-246-510-00	CARBON	36K	5%	1/4W	
R559	1-246-509-00	CARBON	33K	5%	1/4W	
R562	1-246-491-00	CARBON	5.6K	5%	1/4W	
R563	1-246-473-00	CARBON	1K	5%	1/4W	
R564	1-246-521-00	CARBON	100K	5%	1/4W	
R567	1-246-509-00	CARBON	33K	5%	1/4W	
R572	1-246-521-00	CARBON	100K	5%	1/4W	
R573	1-246-515-00	CARBON	56K	5%	1/4W	
R576	1-246-497-00	CARBON	10K	5%	1/4W	
R580	1-246-475-00	CARBON	1.2K	5%	1/4W	
R581	1-246-499-00	CARBON	12K	5%	1/4W	
R582	1-246-521-00	CARBON	100K	5%	1/4W	
R583	1-246-513-00	CARBON	47K	5%	1/4W	
R584	1-246-497-00	CARBON	10K	5%	1/4W	
R601	1-246-513-00	CARBON	47K	5%	1/4W	
R602	1-246-505-00	CARBON	22K	5%	1/4W	
R603	1-246-497-00	CARBON	10K	5%	1/4W	
R604	1-246-499-00	CARBON	12K	5%	1/4W	
R605	1-246-497-00	CARBON	10K	5%	1/4W	
R606	1-246-497-00	CARBON	10K	5%	1/4W	
R607	1-214-180-00	METAL	100K	1%	1/4W	
R608	1-246-497-00	CARBON	10K	5%	1/4W	
R609	1-246-521-00	CARBON	100K	5%	1/4W	
R610	1-246-497-00	CARBON	10K	5%	1/4W	
R611	1-246-497-00	CARBON	10K	5%	1/4W	
R612	1-246-525-00	CARBON	150K	5%	1/4W	
R613	1-246-497-00	CARBON	10K	5%	1/4W	
R614	1-246-521-00	CARBON	100K	5%	1/4W	
R615	1-246-511-00	CARBON	39K	5%	1/4W	
R617	1-246-489-00	CARBON	4.7K	5%	1/4W	
R618	1-246-501-00	CARBON	15K	5%	1/4W	
R619	1-246-489-00	CARBON	4.7K	5%	1/4W	
R620	1-214-151-00	METAL	6.2K	1%	1/4W	
R621	1-246-497-00	CARBON	10K	5%	1/4W	
R622	1-246-513-00	CARBON	47K	5%	1/4W	
R623	1-246-473-00	CARBON	1K	5%	1/4W	
R624	1-246-473-00	CARBON	1K	5%	1/4W	
R625	1-246-481-00	CARBON	2.2K	5%	1/4W	
R626	1-246-449-00	CARBON	100	5%	1/4W	
R627	1-246-489-00	CARBON	4.7K	5%	1/4W	
R628	1-246-497-00	CARBON	10K	5%	1/4W	
R629	1-246-497-00	CARBON	10K	5%	1/4W	
R630	1-246-513-00	CARBON	47K	5%	1/4W	
R631	1-246-538-00	CARBON	510K	5%	1/4W	
R632	1-246-497-00	CARBON	10K	5%	1/4W	
R633	1-246-509-00	CARBON	33K	5%	1/4W	
R636	1-246-513-00	CARBON	47K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No	Part No	Description				Remark
R638	1-246-509-00	CARBON	33K	5%	1/4W	
R639	1-246-513-00	CARBON	47K	5%	1/4W	
R640	1-246-501-00	CARBON	15K	5%	1/4W	
R641	1-246-521-00	CARBON	100K	5%	1/4W	
R642	1-246-513-00	CARBON	47K	5%	1/4W	
R643	1-246-524-00	CARBON	130K	5%	1/4W	
R644	1-246-497-00	CARBON	10K	5%	1/4W	
R645	1-246-513-00	CARBON	47K	5%	1/4W	
R646	1-246-503-00	CARBON	18K	5%	1/4W	
R647	1-246-517-00	CARBON	68K	5%	1/4W	
R648	1-214-172-00	METAL	47K	1%	1/4W	
R701	1-246-491-00	CARBON	5.6K	5%	1/4W	
R702	1-246-521-00	CARBON	100K	5%	1/4W	
R703	1-246-501-00	CARBON	15K	5%	1/4W	
R704	1-246-515-00	CARBON	56K	5%	1/4W	
R707	1-246-497-00	CARBON	10K	5%	1/4W	
R709	1-246-527-00	CARBON	180K	5%	1/4W	
R710	1-246-497-00	CARBON	10K	5%	1/4W	
R711	1-246-505-00	CARBON	22K	5%	1/4W	
R712	1-246-484-00	CARBON	3K	5%	1/4W	
R713	1-246-490-00	CARBON	5.1K	5%	1/4W	
R714	1-246-480-00	CARBON	2K	5%	1/4W	
R715	1-246-516-00	CARBON	62K	5%	1/4W	
R716	1-246-497-00	CARBON	10K	5%	1/4W	
R717	1-246-516-00	CARBON	62K	5%	1/4W	
R718	1-246-490-00	CARBON	5.1K	5%	1/4W	
R719	1-246-505-00	CARBON	22K	5%	1/4W	
R720	1-246-495-00	CARBON	8.2K	5%	1/4W	
R721	1-246-472-00	CARBON	910	5%	1/4W	
R722	1-246-473-00	CARBON	1K	5%	1/4W	
R723	1-246-513-00	CARBON	47K	5%	1/4W	
R724	1-246-515-00	CARBON	56K	5%	1/4W	
R725	1-246-527-00	CARBON	180K	5%	1/4W	
R727	1-246-500-00	CARBON	13K	5%	1/4W	
R728	1-246-521-00	CARBON	100K	5%	1/4W	
R729	1-246-507-00	CARBON	27K	5%	1/4W	
R730	1-246-521-00	CARBON	100K	5%	1/4W	
R731	1-246-501-00	CARBON	15K	5%	1/4W	
R732	1-246-498-00	CARBON	11K	5%	1/4W	
R733	1-246-489-00	CARBON	4.7K	5%	1/4W	
R734	1-246-477-00	CARBON	1.5K	5%	1/4W	
R735	1-246-481-00	CARBON	2.2K	5%	1/4W	
R736	1-246-447-00	CARBON	82	5%	1/4W	
R737	1-246-489-00	CARBON	4.7K	5%	1/4W	
R738	1-246-457-00	CARBON	220	5%	1/4W	
R739	1-246-471-00	CARBON	820	5%	1/4W	
R740	1-246-807-00	CARBON	100K	5%	1/8W	
R741	1-246-807-00	CARBON	100K	5%	1/8W	
R742	1-246-807-00	CARBON	100K	5%	1/8W	
R743	1-246-521-00	CARBON	100K	5%	1/4W	
R744	1-246-501-00	CARBON	15K	5%	1/4W	
R745	1-246-521-00	CARBON	100K	5%	1/4W	
R746	1-246-792-00	CARBON	5.6K	5%	1/8W	

Ref.No	Part No	Description				Remark
R747	1-246-803-00	CARBON	47K	5%	1/8W	
R748	1-246-521-00	CARBON	100K	5%	1/4W	
R749	1-246-513-00	CARBON	47K	5%	1/4W	
R750	1-246-509-00	CARBON	33K	5%	1/4W	
R751	1-246-507-00	CARBON	27K	5%	1/4W	
R752	1-246-521-00	CARBON	100K	5%	1/4W	
R753	1-246-521-00	CARBON	100K	5%	1/4W	
R754	1-246-509-00	CARBON	33K	5%	1/4W	
R756	1-246-521-00	CARBON	100K	5%	1/4W	
R757	1-246-521-00	CARBON	100K	5%	1/4W	
R758	1-246-521-00	CARBON	100K	5%	1/4W	
R759	1-246-521-00	CARBON	100K	5%	1/4W	
R760	1-246-501-00	CARBON	15K	5%	1/4W	

VARIABLE RESISTOR

RV001	1-224-254-XX	RES, ADJ, SOLID 47K
RV002	1-224-254-XX	RES, ADJ, SOLID 47K
RV003	1-224-254-XX	RES, ADJ, SOLID 47K
RV004	1-224-253-XX	RES, ADJ, METAL GLAZE 22K
RV005	1-224-253-XX	RES, ADJ, METAL GLAZE 22K
RV006	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV007	1-224-251-XX	RES, ADJ, SOLID 4.7K
RV008	1-224-644-XX	RES, ADJ, CARBON 3.3K
RV009	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV010	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV011	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV061	1-224-646-XX	RES, ADJ, CARBON 22K
RV062	1-224-646-XX	RES, ADJ, CARBON 22K
RV063	1-224-646-XX	RES, ADJ, CARBON 22K
RV064	1-226-910-00	RES, VAR, CARBON 100K
RV501	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV502	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV503	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV504	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV505	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV506	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV507	1-224-250-XX	RES, ADJ, METAL GLAZE 2.2K
RV508	1-224-252-XX	RES, ADJ, METAL GLAZE 10K
RV509	1-226-934-00	RES, VAR, CARBON 100K
RV601	1-224-255-XX	RES, ADJ, METAL GLAZE 100K
RV602	1-224-255-XX	RES, ADJ, METAL GLAZE 100K

SWITCH

S001	1-552-836-00	SWITCH, SLIDE
S002	1-552-835-21	SWITCH, SLIDE
S004	1-552-821-00	SWITCH, SLIDE

TRANSFORMER

T061	1-433-230-00	TRANSFORMER, OSCILLATOR

Ref.No	Part No	Description				Remark
	♠:A-6717-193-A	SY-21 BOARD, COMPLETE				E-310
	♠:3-661-747-00	HOLDER, ID-2				

CAPACITOR

Ref.No	Part No	Description				Remark
C601	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C602	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C603	1-108-377-00	MYLAR	0.01MF	10%	100V	
C604	1-123-318-00	ELECT	33MF	20%	16V	
C605	1-123-316-00	ELECT	10MF	20%	16V	
C606	1-108-377-00	MYLAR	0.01MF	10%	100V	
C607	1-123-328-00	ELECT	4.7MF	20%	25V	
C608	1-131-415-00	ELECT(SOLID)	0.68MF	10%	16V	
C609	1-123-328-00	ELECT	4.7MF	20%	25V	
C610	1-123-328-00	ELECT	4.7MF	20%	25V	
C611	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C612	1-161-013-00	CERAMIC	0.01MF	10%	25V	

CONNECTOR

Ref.No	Part No	Description
CN601	♠:1-508-744-00	PIN, CONNECTOR 10P
CN602	♠:1-508-742-00	PIN, CONNECTOR 3P
CN603	♠:1-508-742-00	PIN, CONNECTOR 3P

DIODE

Ref.No	Part No	Description
D601	8-719-815-55	DIODE 1S1555
D602	8-719-815-55	DIODE 1S1555
D603	8-719-815-55	DIODE 1S1555
D604	8-719-815-55	DIODE 1S1555
D605	8-719-815-55	DIODE 1S1555
D606	8-719-815-55	DIODE 1S1555
D607	8-719-815-55	DIODE 1S1555
D608	8-719-200-02	DIODE 10E-2
D609	8-719-911-19	DIODE 1SS119

IC

Ref.No	Part No	Description
IC601	8-759-618-48	IC M51848L
IC602	8-759-240-11	IC TC4011BP
IC603	8-759-145-58	IC UPC4558C

TRANSISTOR

Ref.No	Part No	Description
Q601	8-729-178-54	TRANSISTOR 2SC2785
Q602	8-729-178-54	TRANSISTOR 2SC2785
Q603	8-729-117-54	TRANSISTOR 2SA1175
Q604	8-729-178-54	TRANSISTOR 2SC2785
Q605	8-729-178-54	TRANSISTOR 2SC2785
Q606	8-729-178-54	TRANSISTOR 2SC2785
Q607	8-729-178-54	TRANSISTOR 2SC2785
Q608	8-729-117-54	TRANSISTOR 2SA1175
Q609	8-729-178-54	TRANSISTOR 2SC2785
Q610	8-729-178-54	TRANSISTOR 2SC2785
Q611	8-729-178-54	TRANSISTOR 2SC2785
Q612	8-729-178-54	TRANSISTOR 2SC2785
Q613	8-729-117-54	TRANSISTOR 2SA1175
Q614	8-729-178-54	TRANSISTOR 2SC2785
Q615	8-729-663-47	TRANSISTOR 2SC1364
Q616	8-729-316-16	TRANSISTOR 2SC1061-C

RESISTOR

Ref.No	Part No	Description				Remark
R025	1-246-513-00	CARBON	47K	5%	1/4W	
R026	1-246-513-00	CARBON	47K	5%	1/4W	
R601	1-246-508-00	CARBON	30K	5%	1/4W	
R602	1-246-510-00	CARBON	36K	5%	1/4W	
R603	1-246-521-00	CARBON	100K	5%	1/4W	
R604	1-246-489-00	CARBON	4.7K	5%	1/4W	
R605	1-246-495-00	CARBON	8.2K	5%	1/4W	
R606	1-246-513-00	CARBON	47K	5%	1/4W	
R607	1-246-521-00	CARBON	100K	5%	1/4W	
R608	1-246-521-00	CARBON	100K	5%	1/4W	
R609	1-246-513-00	CARBON	47K	5%	1/4W	
R610	1-246-513-00	CARBON	47K	5%	1/4W	
R611	1-246-521-00	CARBON	100K	5%	1/4W	
R612	1-246-513-00	CARBON	47K	5%	1/4W	
R613	1-246-505-00	CARBON	22K	5%	1/4W	
R614	1-246-487-00	CARBON	3.9K	5%	1/4W	
R615	1-246-513-00	CARBON	47K	5%	1/4W	
R616	1-246-513-00	CARBON	47K	5%	1/4W	
R617	1-246-460-00	CARBON	300	5%	1/4W	
R618	1-246-513-00	CARBON	47K	5%	1/4W	
R619	1-246-528-00	CARBON	200K	5%	1/4W	
R620	1-246-528-00	CARBON	200K	5%	1/4W	
R621	1-246-497-00	CARBON	10K	5%	1/4W	
R622	1-246-521-00	CARBON	100K	5%	1/4W	
R623	1-246-521-00	CARBON	100K	5%	1/4W	
R624	1-246-865-00	CARBON	62K	5%	1/8W	
R627	1-246-497-00	CARBON	10K	5%	1/4W	
R628	1-246-481-00	CARBON	2.2K	5%	1/4W	
R629	1-246-513-00	CARBON	47K	5%	1/4W	
R630	1-246-521-00	CARBON	100K	5%	1/4W	
R631	1-246-513-00	CARBON	47K	5%	1/4W	
R632	1-246-449-00	CARBON	100	5%	1/4W	
R633	1-246-489-00	CARBON	4.7K	5%	1/4W	
R634	1-246-489-00	CARBON	4.7K	5%	1/4W	
R635	1-246-521-00	CARBON	100K	5%	1/4W	
R636	1-246-521-00	CARBON	100K	5%	1/4W	
R637	1-246-521-00	CARBON	100K	5%	1/4W	
R638	1-246-513-00	CARBON	47K	5%	1/4W	
R639	1-246-521-00	CARBON	100K	5%	1/4W	
R640	1-246-497-00	CARBON	10K	5%	1/4W	
R641	1-246-513-00	CARBON	47K	5%	1/4W	
R642	1-246-505-00	CARBON	22K	5%	1/4W	
R643	1-246-449-00	CARBON	100	5%	1/4W	
R644	1-246-538-00	CARBON	510K	5%	1/4W	
R645	1-246-513-00	CARBON	47K	5%	1/4W	
R646	1-246-505-00	CARBON	22K	5%	1/4W	
R647	1-246-481-00	CARBON	2.2K	5%	1/4W	
R648	1-246-484-00	CARBON	3K	5%	1/4W	

- Items marked "♠" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref.No	Part No	Description				Remark
R649⚠	.1-212-360-00	METAL	1	5%	1W	F
R650	1-246-481-00	CARBON	2.2K	5%	1/4W	
R651	1-246-449-00	CARBON	100	5%	1/4W	

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♠:A-6717-195-A **SY-20 BOARD, COMPLETE** E-303

CAPACITOR

Ref.No	Part No	Description				Remark
C501	1-123-319-00	ELECT	47MF	20%	16V	
C502	1-123-351-00	ELECT	0.47MF	20%	50V	
C503	1-161-185-00	CERAMIC	0.01MF	5%	25V	
C504	1-123-353-00	ELECT	2.2MF	20%	50V	
C505	1-123-353-00	ELECT	2.2MF	20%	50V	
C506	1-102-824-00	CERAMIC	430PF	5%	50V	
C507	1-161-181-00	CERAMIC	0.0047MF	5%	25V	
C508	1-123-353-00	ELECT	2.2MF	20%	50V	
C509	1-102-824-00	CERAMIC	430PF	5%	50V	
C510	1-123-354-00	ELECT	3.3MF	20%	50V	
C511	1-123-319-00	ELECT	47MF	20%	16V	
C513	1-161-379-00	CERAMIC	0.01MF	20%	25V	
C514	1-161-379-00	CERAMIC	0.01MF	20%	25V	

CONNECTOR

Ref.No	Part No	Description
CN501	♠:1-508-850-00	PIN, CONNECTOR 12P
CN502	♠:1-508-735-21	PIN, CONNECTOR 5P
CN503	♠:1-508-847-00	PIN, CONNECTOR 4P
CN504	♠:1-508-734-00	CONNECTOR PIN
CN505	♠:1-508-734-00	PIN, CONNECTOR 3P
CN506	♠:1-508-848-00	PIN, CONNECTOR 6P
CN507	♠:1-508-734-00	PIN, CONNECTOR 3P

DIODE

Ref.No	Part No	Description
D501	8-719-815-55	DIODE 1S1555
D502	8-719-815-55	DIODE 1S1555
D503	8-719-815-55	DIODE 1S1555
D504	8-719-815-55	DIODE 1S1555
D505	8-719-815-55	DIODE 1S1555
D506	8-719-815-55	DIODE 1S1555
D507	8-719-815-55	DIODE 1S1555
D508	8-719-815-55	DIODE 1S1555

IC

Ref.No	Part No	Description
IC501	8-759-240-13	IC TC4013BP

TRANSISTOR

Ref.No	Part No	Description
Q501	8-729-178-54	TRANSISTOR 2SC2785F
Q502	8-729-178-54	TRANSISTOR 2SC2785F
Q503	8-729-663-47	TRANSISTOR 2SC1364
Q504	8-729-902-11	TRANSISTOR 2SC2021
Q505	8-729-902-11	TRANSISTOR 2SC2021
Q506	8-729-178-54	TRANSISTOR 2SC2785F
Q507	8-729-178-54	TRANSISTOR 2SC2785F
Q508	8-729-663-47	TRANSISTOR 2SC1364
Q509	8-729-902-11	TRANSISTOR 2SC2021
Q510	8-729-902-11	TRANSISTOR 2SC2021
Q511	8-729-902-11	TRANSISTOR 2SC2021
Q512	8-729-902-11	TRANSISTOR 2SC2021
Q513	8-729-108-54	TRANSISTOR 2SC2785F
Q514	8-729-117-54	TRANSISTOR 2SA1175F
Q515	8-729-117-54	TRANSISTOR 2SA1175F
Q516	8-729-108-54	TRANSISTOR 2SC2785F
Q517	8-729-108-54	TRANSISTOR 2SC2785F
Q518	8-729-982-22	TRANSISTOR 2SB822-Q
Q519	8-729-198-52	TRANSISTOR 2SD985-L
Q520	8-729-982-22	TRANSISTOR 2SB822-Q
Q521	8-729-198-52	TRANSISTOR 2SD985-L

RESISTOR

Ref.No	Part No	Description				Remark
R503	1-246-862-00	CARBON	36K	5%	1/8W	
R504	1-246-477-00	CARBON	1.5K	5%	1/4W	
R505	1-246-477-00	CARBON	1.5K	5%	1/4W	
R506	1-246-866-00	CARBON	75K	5%	1/8W	
R507	1-246-859-00	CARBON	20K	5%	1/8W	
R508	1-246-521-00	CARBON	100K	5%	1/4W	
R509	1-246-473-00	CARBON	1K	5%	1/4W	
R510	1-246-804-00	CARBON	56K	5%	1/8W	
R511	1-246-799-00	CARBON	22K	5%	1/8W	
R512	1-246-807-00	CARBON	100K	5%	1/8W	
R513	1-246-456-00	CARBON	200	5%	1/4W	
R514	1-246-795-00	CARBON	10K	5%	1/8W	
R515	1-246-795-00	CARBON	10K	5%	1/8W	
R516	1-246-807-00	CARBON	100K	5%	1/8W	
R517	1-246-795-00	CARBON	10K	5%	1/8W	
R518	1-246-465-00	CARBON	470	5%	1/4W	
R519	1-246-795-00	CARBON	10K	5%	1/8W	
R520	1-246-799-00	CARBON	22K	5%	1/8W	
R521	1-246-452-00	CARBON	130	5%	1/4W	
R522	1-246-472-00	CARBON	910	5%	1/4W	
R523	1-246-484-00	CARBON	3K	5%	1/4W	
R524	1-246-792-00	CARBON	5.6K	5%	1/8W	
R525	1-246-807-00	CARBON	100K	5%	1/8W	
R526	1-246-791-00	CARBON	4.7K	5%	1/8W	
R527	1-246-456-00	CARBON	200	5%	1/4W	
R528	1-246-807-00	CARBON	100K	5%	1/8W	
R529	1-246-795-00	CARBON	10K	5%	1/8W	
R530	1-246-795-00	CARBON	10K	5%	1/8W	
R531	1-246-807-00	CARBON	100K	5%	1/8W	
R532	1-246-795-00	CARBON	10K	5%	1/8W	
R533	1-246-465-00	CARBON	470	5%	1/4W	
R534	1-246-795-00	CARBON	10K	5%	1/8W	
R535	1-246-804-00	CARBON	56K	5%	1/8W	
R536	1-246-804-00	CARBON	56K	5%	1/8W	
R537	1-246-795-00	CARBON	10K	5%	1/8W	
R538	1-246-803-00	CARBON	47K	5%	1/8W	
R539	1-246-473-00	CARBON	1K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref.No	Part No	Description				Remark
R540	1-246-433-00	CARBON	22	5%	1/4W	
R541	1-246-807-00	CARBON	100K	5%	1/8W	
R542	1-246-807-00	CARBON	100K	5%	1/8W	
R543	1-246-497-00	CARBON	10K	5%	1/4W	
R544	1-246-852-00	CARBON	5.1K	5%	1/8W	
R545	1-246-807-00	CARBON	100K	5%	1/8W	
R546	1-246-795-00	CARBON	10K	5%	1/8W	
R547	1-246-799-00	CARBON	22K	5%	1/8W	
R548	1-246-800-00	CARBON	27K	5%	1/8W	
R549	1-246-803-00	CARBON	47K	5%	1/8W	
R550	1-246-497-00	CARBON	10K	5%	1/4W	
R551	1-246-490-00	CARBON	5.1K	5%	1/4W	
R552	1-246-852-00	CARBON	5.1K	5%	1/8W	
R554	1-246-807-00	CARBON	100K	5%	1/8W	
R555	1-246-805-00	CARBON	68K	5%	1/8W	
R556	1-246-803-00	CARBON	47K	5%	1/8W	
R557	1-246-803-00	CARBON	47K	5%	1/8W	
R558 ⚠.	1-206-439-00	METAL	1	5%	2W	F
R559	1-246-473-00	CARBON	1K	5%	1/4W	
R560	1-244-856-00	CARBON	200	5%	1/2W	
R561	1-246-797-00	CARBON	15K	5%	1/8W	
R562	1-246-473-00	CARBON	1K	5%	1/4W	
R563	1-244-856-00	CARBON	200	5%	1/2W	
R564	1-246-797-00	CARBON	15K	5%	1/8W	

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♠:A-6717-196-A SY-19 BOARD, COMPLETE E-304

CAPACITOR

Ref.No	Part No	Description				Remark
C001	1-108-377-00	MYLAR	0.01MF	10%	100V	
C002	1-108-377-00	MYLAR	0.01MF	10%	100V	
C003	1-123-318-00	ELECT	33MF	20%	16V	
C004	1-161-185-00	CERAMIC	0.01MF	5%	25V	
C005	1-123-354-00	ELECT	3.3MF	20%	50V	
C006	1-123-354-00	ELECT	3.3MF	20%	50V	
C007	1-161-185-00	CERAMIC	0.01MF	5%	25V	
C008	1-123-320-00	ELECT	100MF	20%	16V	
C009	1-161-189-00	CERAMIC	0.022MF	5%	25V	
C010	1-123-328-00	ELECT	4.7MF	20%	25V	
C011	1-123-328-00	ELECT	4.7MF	20%	25V	
C012	1-123-307-00	ELECT	100MF	20%	10V	
C013	1-161-189-00	CERAMIC	0.022MF	5%	25V	
C014	1-161-189-00	CERAMIC	0.022MF	5%	25V	
C015	1-123-318-00	ELECT	33MF	20%	16V	
C016	1-123-317-00	ELECT	22MF	20%	16V	
C018	1-123-352-00	ELECT	1MF	20%	50V	
C019	1-123-317-00	ELECT	22MF	20%	16V	
C020	1-123-351-00	ELECT	0.47MF	20%	50V	
C022	1-123-351-00	ELECT	0.47MF	20%	50V	
C023	1-102-824-00	CERAMIC	430PF	5%	50V	
C024	1-129-794-00	FILM	0.0033MF	5%	100V	
C025	1-123-353-00	ELECT	2.2MF	20%	50V	
C026	1-123-352-00	ELECT	1MF	20%	50V	
C027	1-123-352-00	ELECT	1MF	20%	50V	
C028	1-123-328-00	ELECT	4.7MF	20%	25V	
C029	1-161-185-00	CERAMIC	0.01MF	5%	25V	
C030	1-123-319-00	ELECT	47MF	20%	16V	
C031	1-123-351-00	ELECT	0.47MF	20%	50V	
C032	1-123-305-00	ELECT	33MF	20%	10V	
C033	1-123-316-00	ELECT	10MF	20%	16V	
C034	1-123-351-00	ELECT	0.47MF	20%	50V	
C035	1-123-354-00	ELECT	3.3MF	20%	50V	

CONNECTOR

Ref.No	Part No	Description
CN001♠:	1-508-744-00	PIN, CONNECTOR 10P
CN002♠:	1-508-846-00	PIN, CONNECTOR 8P
CN003♠:	1-508-744-00	PIN, CONNECTOR 10P
CN004♠:	1-508-744-00	PIN, CONNECTOR 10P
CN005♠:	1-508-846-00	PIN, CONNECTOR 8P
CN006♠:	1-508-742-00	PIN, CONNECTOR 3P
CN007♠:	1-508-742-00	PIN, CONNECTOR 3P
CN008♠:	1-508-850-00	PIN, CONNECTOR 12P
CN009♠:	1-508-736-00	PIN, CONNECTOR 10P
CN010♠:	1-508-734-21	PIN, CONNECTOR 3P
CN012♠:	1-508-847-00	PIN, CONNECTOR 4P
CN013♠:	1-508-734-00	PIN, CONNECTOR 3P
CN014♠:	1-508-744-00	PIN, CONNECTOR 10P

COMPOSITION

Ref.No	Part No	Description
CP001	1-231-957-00	COMPOSITION CIRCUIT BLOCK
CP002	1-232-002-00	COMPOSITION CIRCUIT BLOCK
CP003	1-231-934-00	COMPOSITION CIRCUIT BLOCK
CP004	1-231-935-00	COMPOSITION CIRCUIT BLOCK
CP005	1-231-974-00	COMPOSITION CIRCUIT BLOCK
CP006	1-231-979-00	COMPOSITION CIRCUIT BLOCK
CP007	1-231-970-00	COMPOSITION CIRCUIT BLOCK
CP008	1-231-760-00	COMPOSITION CIRCUIT BLOCK
CP009	1-231-937-00	COMPOSITION CIRCUIT BLOCK
CP010	1-231-940-00	COMPOSITION CIRCUIT BLOCK
CP011	1-231-941-00	COMPOSITION CIRCUIT BLOCK
CP012	1-231-958-00	COMPOSITION CIRCUIT BLOCK
CP013	1-231-942-00	COMPOSITION CIRCUIT BLOCK
CP014	1-231-959-00	COMPOSITION CIRCUIT BLOCK
CP015	1-231-975-00	COMPOSITION CIRCUIT BLOCK
CP016	1-231-943-00	COMPOSITION CIRCUIT BLOCK
CP017	1-231-960-00	COMPOSITION CIRCUIT BLOCK
CP018	1-231-961-00	COMPOSITION CIRCUIT BLOCK
CP019	1-231-962-00	COMPOSITION CIRCUIT BLOCK
CP020	1-231-971-00	COMPOSITION CIRCUIT BLOCK
CP021	1-231-938-00	COMPOSITION CIRCUIT BLOCK
CP022	1-231-976-00	COMPOSITION CIRCUIT BLOCK
CP023	1-231-963-00	COMPOSITION CIRCUIT BLOCK
CP024	1-231-964-00	COMPOSITION CIRCUIT BLOCK
CP025	1-231-977-00	COMPOSITION CIRCUIT BLOCK
CP026	1-231-978-00	COMPOSITION CIRCUIT BLOCK
CP027	1-231-944-00	COMPOSITION CIRCUIT BLOCK

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No	Part No	Description	Remark
CP028	1-231-945-00	COMPOSITION CIRCUIT BLOCK	
CP029	1-231-946-00	COMPOSITION CIRCUIT BLOCK	
CP030	1-231-908-00	COMPOSITION CIRCUIT BLOCK	
CP031	1-232-001-00	COMPOSITION CIRCUIT BLOCK	
CP032	1-231-947-00	COMPOSITION CIRCUIT BLOCK	

DIODE

Ref.No	Part No	Description	Remark
D001	8-719-200-02	DIODE 10E-2	
D003	8-719-815-55	DIODE 1S1555	
D004	8-719-815-55	DIODE 1S1555	
D005	8-719-815-55	DIODE 1S1555	
D006	8-719-815-55	DIODE 1S1555	
D007	8-719-182-07	DIODE RD8.2E-B	
D008	8-719-815-55	DIODE 1S1555	
D009	8-719-815-55	DIODE 1S1555	
D010	8-719-815-55	DIODE 1S1555	
D011	8-719-200-02	DIODE 10E-2	
D012	8-719-200-02	DIODE 10E-2	
D013	8-719-200-02	DIODE 10E-2	
D014	8-719-200-02	DIODE 10E-2	
D015	8-719-200-02	DIODE 10E-2	
D016	8-719-200-02	DIODE 10E-2	
D017	8-719-200-02	DIODE 10E-2	
D018	8-719-200-02	DIODE 10E-2	
D019	8-719-815-55	DIODE 1S1555	
D020	8-719-815-55	DIODE 1S1555	
D021	8-719-815-55	DIODE 1S1555	
D022	8-719-815-55	DIODE 1S1555	
D023	8-719-815-55	DIODE 1S1555	
D024	8-719-815-55	DIODE 1S1555	
D025	8-719-815-55	DIODE 1S1555	
D026	8-719-200-10	DIODE 10E10P	
D027	8-719-815-55	DIODE 1S1555	
D028	8-719-815-55	DIODE 1S1555	
D029	8-719-911-19	DIODE 1SS119	
D030	8-719-815-55	DIODE 1S1555	
D031	8-719-815-55	DIODE 1S1555	
D032	8-719-113-07	DIODE RD13E-B	
D033	8-719-113-07	DIODE RD13E-B	
D034	8-719-113-07	DIODE RD13E-B	
D035	8-719-113-07	DIODE RD13E-B	
D036	8-719-113-07	DIODE RD13E-B	
D037	8-719-113-07	DIODE RD13E-B	
D038	8-719-113-07	DIODE RD13E-B	
D039	8-719-815-55	DIODE 1S1555	
D040	8-719-815-55	DIODE 1S1555	
D041	8-719-815-55	DIODE 1S1555	

IC

Ref.No	Part No	Description	Remark
IC001	8-759-146-37	IC UPD546C037	
IC002	8-759-240-11	IC TC4011BP	
IC003	8-759-240-11	IC TC4011BP	
IC004	8-759-240-81	IC TC4081BP	
IC005	8-759-240-69	IC TC4069UBP	
IC006	8-759-618-48	IC M51848L	
IC007	8-743-420-00	IC BX-342	

COIL

Ref.No	Part No	Description	Remark
L001	1-405-876-00	COIL, OSCILLATOR	
L002	1-407-510-00	MICRO INDUCTOR 33MMH	

TRANSISTOR

Ref.No	Part No	Description	Remark
Q001	8-729-117-54	TRANSISTOR 2SA1175	
Q002	8-729-117-54	TRANSISTOR 2SA1175	
Q003	8-729-117-54	TRANSISTOR 2SA1175	
Q004	8-729-663-47	TRANSISTOR 2SC1364	
Q005	8-729-316-16	TRANSISTOR 2SC1061	
Q006	⚠.8-729-177-32	TRANSISTOR 2SD773	
Q007	8-729-663-47	TRANSISTOR 2SC1364	
Q008	8-729-177-32	TRANSISTOR 2SD773	
Q009	⚠.8-729-177-32	TRANSISTOR 2SD773	
Q010	8-729-663-47	TRANSISTOR 2SC1364	
Q011	8-729-177-32	TRANSISTOR 2SD773	
Q012	⚠.8-729-177-32	TRANSISTOR 2SD773	
Q013	8-729-663-47	TRANSISTOR 2SC1364	
Q014	8-729-177-32	TRANSISTOR 2SD773	
Q015	8-729-177-32	TRANSISTOR 2SD773	
Q016	8-729-663-47	TRANSISTOR 2SC1364	
Q017	8-729-177-32	TRANSISTOR 2SD773	
Q018	⚠.8-729-177-32	TRANSISTOR 2SD773	
Q019	8-729-178-54	TRANSISTOR 2SC2785F	
Q020	8-729-178-54	TRANSISTOR 2SC2785F	
Q021	8-729-178-54	TRANSISTOR 2SC2785F	
Q024	⚠.8-729-177-32	TRANSISTOR 2SD773	
Q025	8-729-178-54	TRANSISTOR 2SC2785F	
Q026	8-729-117-54	TRANSISTOR 2SA1175F	
Q027	8-729-178-54	TRANSISTOR 2SC2785F	
Q028	8-729-178-54	TRANSISTOR 2SC2785F	
Q029	8-729-178-54	TRANSISTOR 2SC2785F	
Q030	8-729-178-54	TRANSISTOR 2SC2785F	
Q031	8-729-178-54	TRANSISTOR 2SC2785F	
Q032	8-729-178-54	TRANSISTOR 2SC2785F	
Q033	8-729-178-54	TRANSISTOR 2SC2785F	
Q034	8-729-178-54	TRANSISTOR 2SC2785F	
Q035	8-729-117-54	TRANSISTOR 2SA1175F	
Q036	8-729-178-54	TRANSISTOR 2SC2785F	
Q037	8-729-178-54	TRANSISTOR 2SC2785F	
Q038	8-729-178-54	TRANSISTOR 2SC2785F	
Q042	8-729-178-54	TRANSISTOR 2SC2785F	
Q043	8-729-178-54	TRANSISTOR 2SC2785F	
Q044	8-729-117-54	TRANSISTOR 2SA1175F	
Q045	8-729-117-54	TRANSISTOR 2SA1175F	
Q046	8-729-178-54	TRANSISTOR 2SC2785F	
Q047	8-729-178-54	TRANSISTOR 2SC2785F	
Q048	8-729-178-54	TRANSISTOR 2SC2785F	
Q049	8-729-117-54	TRANSISTOR 2SA1175F	
Q050	8-729-178-54	TRANSISTOR 2SC2785F	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

RESISTOR

Ref.No	Part No	Description				Remark
R001	⚠.1-246-981-00	CARBON	4.7	5%	1/8W	F
R002	1-246-795-00	CARBON	10K	5%	1/8W	
R003	1-246-803-00	CARBON	47K	5%	1/8W	
R004	1-246-795-00	CARBON	10K	5%	1/8W	
R005	⚠.1-211-929-00	CARBON	82	5%	1/8W	F
R006	⚠.1-211-929-00	CARBON	82	5%	1/8W	F
R007	⚠.1-211-929-00	CARBON	82	5%	1/8W	F
R008	⚠.1-211-929-00	CARBON	82	5%	1/8W	F
R009	⚠.1-211-929-00	CARBON	82	5%	1/8W	F
R011	1-246-481-00	CARBON	2.2K	5%	1/4W	
R012	1-246-521-00	CARBON	100K	5%	1/4W	
R013	1-246-521-00	CARBON	100K	5%	1/4W	
R014	1-246-521-00	CARBON	100K	5%	1/4W	
R015	1-246-521-00	CARBON	100K	5%	1/4W	
R016	1-246-513-00	CARBON	47K	5%	1/4W	
R017	1-246-521-00	CARBON	100K	5%	1/4W	
R018	1-246-473-00	CARBON	1K	5%	1/4W	
R020	1-246-521-00	CARBON	100K	5%	1/4W	
R021	1-246-807-00	CARBON	100K	5%	1/8W	
R022	1-246-473-00	CARBON	1K	5%	1/4W	
R023	1-246-521-00	CARBON	100K	5%	1/4W	
R024	1-246-490-00	CARBON	5.1K	5%	1/4W	
R025	1-246-513-00	CARBON	47K	5%	1/4W	
R026	1-246-521-00	CARBON	100K	5%	1/4W	
R029	1-246-521-00	CARBON	100K	5%	1/4W	
R031	1-246-485-00	CARBON	3.3K	5%	1/4W	
R032	1-246-517-00	CARBON	68K	5%	1/4W	
R033	1-246-517-00	CARBON	68K	5%	1/4W	
R034	1-246-473-00	CARBON	1K	5%	1/4W	
R035	1-246-481-00	CARBON	2.2K	5%	1/4W	
R036	1-246-473-00	CARBON	1K	5%	1/4W	
R037	1-231-435-00	RES, ARRAY				
R038	1-231-435-00	RES, ARRAY				
R039	1-231-434-00	RES, ARRAY				
R040	1-231-434-00	RES, ARRAY				
R041	1-246-807-00	CARBON	100K	5%	1/8W	
R042	1-246-494-00	CARBON	7.5K	5%	1/4W	
R043	1-246-528-00	CARBON	200K	5%	1/4W	
R044	1-246-513-00	CARBON	47K	5%	1/4W	
R045	1-246-443-00	CARBON	56	5%	1/4W	
R046	1-246-791-00	CARBON	4.7K	5%	1/8W	
R047	1-246-803-00	CARBON	47K	5%	1/8W	
R048	1-246-795-00	CARBON	10K	5%	1/8W	
R049	1-246-783-00	CARBON	1K	5%	1/8W	
R050	1-246-497-00	CARBON	10K	1%	1/4W	

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♠:1-603-555-00 TU-15 BOARD E-153

CAPACITOR

Ref.No	Part No	Description				Remark
C001	1-123-353-00	ELECT	2.2MF	20%	50V	
C002	1-123-329-00	ELECT	10MF	20%	25V	

DIODE

D001	8-719-815-55	DIODE	1S1555

COIL

L001	1-407-165-XX	MICRO INDUCTOR	47UH

TRANSISTOR

Q001	=>8-729-612-77	TRANSISTOR	2SA1027R
Q002	=>8-729-612-77	TRANSISTOR	2SA1027R
Q003	=>8-729-612-77	TRANSISTOR	2SA1027R
Q004	8-729-663-47	TRANSISTOR	2SC1363
Q005	8-729-663-47	TRANSISTOR	2SC1363
Q006	=>8-729-663-47	TRANSISTOR	2SC1364
Q007	=>8-729-663-47	TRANSISTOR	2SC1364
Q008	=>8-729-663-47	TRANSISTOR	2SC1364
Q009	=>8-729-612-77	TRANSISTOR	2SA1027R

RESISTOR

R001	1-246-497-00	CARBON	10K	5%	1/4W	
R002	1-246-497-00	CARBON	10K	5%	1/4W	
R003	1-246-497-00	CARBON	10K	5%	1/4W	
R004	1-246-497-00	CARBON	10K	5%	1/4W	
R005	1-246-439-00	CARBON	39	5%	1/4W	
R006	1-246-497-00	CARBON	10K	5%	1/4W	
R007	1-246-497-00	CARBON	10K	5%	1/4W	
R008	1-246-521-00	CARBON	100K	5%	1/4W	
R009	1-246-494-00	CARBON	7.5K	5%	1/4W	
R010	1-246-506-00	CARBON	24K	5%	1/4W	
R011	1-246-497-00	CARBON	10K	5%	1/4W	
R012	1-246-497-00	CARBON	10K	5%	1/4W	
R013	1-246-497-00	CARBON	10K	5%	1/4W	
R014	1-246-497-00	CARBON	10K	5%	1/4W	
R015	1-246-497-00	CARBON	10K	5%	1/4W	
R016	1-211-417-00	CARBON	22	5%	1/8W	F

VARIABLE RESISTOR

RV001	1-224-642-XX	RES, ADJ, CARBON	1K
RV002	1-224-642-XX	RES, ADJ, CARBON	1K

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♠:1-603-556-00 TU-16 BOARD E-154

CAPACITOR

C101	1-123-329-00	ELECT	10MF	20%	25V
C102	1-108-389-00	MYLAR	0.1MF	10%	100V
C103	1-123-329-00	ELECT	10MF	20%	25V
C104	1-123-318-00	ELECT	33MF	20%	16V
C105	1-123-329-00	ELECT	10MF	20%	25V
C106	1-108-389-00	MYLAR	0.1MF	10%	100V

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No	Part No	Description				Remark
C107	1-108-371-00	MYLAR	0.0033MF	10%	100V	

CONNECTOR

CN101	♠:1-508-734-00	PIN, CONNECTOR 3P

DIODE

D101	8-719-815-55	DIODE 1S1555

COIL

L101	1-407-510-00	MICRO INDUCTOR 33MMH

TRANSISTOR

Q101	=>8-729-663-47	TRANSISTOR 2SC1364

RESISTOR

R101	1-246-509-00	CARBON	33K	5%	1/4W
R102	1-246-513-00	CARBON	47K	5%	1/4W
R103	1-246-497-00	CARBON	10K	5%	1/4W
R104	1-246-506-00	CARBON	24K	5%	1/4W

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♠:A-6728-206-A TS-13 BOARD, COMPLETE E-155

♠:1-226-760-12 PRESET UNIT

CAPACITOR

C101	1-123-352-00	ELECT	1MF	20%	50V
C102	1-123-316-00	ELECT	10MF	20%	16V
C103	1-121-806-00	ELECT	10MF	20%	16V

DIODE

Ref.No	Part No	Description	Remark
D101	8-719-815-55	DIODE 1S1555	
D102	8-719-815-55	DIODE 1S1555	
D103	8-719-815-55	DIODE 1S1555	
D104	8-719-815-55	DIODE 1S1555	
D105	8-719-815-55	DIODE 1S1555	
D106	8-719-815-55	DIODE 1S1555	
D107	8-719-815-55	DIODE 1S1555	
D108	8-719-815-55	DIODE 1S1555	
D109	8-719-815-55	DIODE 1S1555	
D110	8-719-815-55	DIODE 1S1555	
D111	8-719-815-55	DIODE 1S1555	
D112	8-719-815-55	DIODE 1S1555	
D113	8-719-815-55	DIODE 1S1555	
D114	8-719-815-55	DIODE 1S1555	
D115	8-719-815-55	DIODE 1S1555	
D116	8-719-815-55	DIODE 1S1555	
D117	8-719-815-55	DIODE 1S1555	
D118	8-719-815-55	DIODE 1S1555	
D119	8-719-815-55	DIODE 1S1555	
D120	8-719-815-55	DIODE 1S1555	
D121	8-719-815-55	DIODE 1S1555	
D122	8-719-815-55	DIODE 1S1555	
D123	8-719-815-55	DIODE 1S1555	
D124	8-719-815-55	DIODE 1S1555	
D125	8-719-815-55	DIODE 1S1555	
D126	8-719-815-55	DIODE 1S1555	
D127	8-719-815-55	DIODE 1S1555	
D128	8-719-815-55	DIODE 1S1555	

NEON LAMP

NE101	1-519-204-00	LAMP, NEON
NE102	1-519-204-00	LAMP, NEON
NE103	1-519-204-00	LAMP, NEON
NE104	1-519-204-00	LAMP, NEON
NE105	1-519-204-00	LAMP, NEON
NE106	1-519-204-00	LAMP, NEON
NE107	1-519-204-00	LAMP, NEON
NE108	1-519-204-00	LAMP, NEON
NE109	1-519-204-00	LAMP, NEON
NE110	1-519-204-00	LAMP, NEON
NE111	1-519-204-00	LAMP, NEON
NE112	1-519-204-00	LAMP, NEON
NE113	1-519-204-00	LAMP, NEON
NE114	1-519-204-00	LAMP, NEON

TRANSISTOR

Q101	=>8-729-663-47	TRANSISTOR 2SC1364

RESISTOR

R101	1-246-528-00	CARBON	200K	5%	1/4W
R102	1-246-505-00	CARBON	22K	5%	1/4W

SWITCH

S129	1-516-226-00	SLIDE SWITCH
SW115	1-552-774-00	SWITCH, PUSH
SW116	1-552-774-00	SWITCH, PUSH
SW117	1-552-774-00	SWITCH, PUSH
SW118	1-552-774-00	SWITCH, PUSH
SW119	1-552-774-00	SWITCH, PUSH
SW120	1-552-774-00	SWITCH, PUSH
SW121	1-552-774-00	SWITCH, PUSH
SW122	1-552-774-00	SWITCH, PUSH
SW123	1-552-774-00	SWITCH, PUSH
SW124	1-552-774-00	SWITCH, PUSH
SW125	1-552-774-00	SWITCH, PUSH
SW126	1-552-774-00	SWITCH, PUSH
SW127	1-552-774-00	SWITCH, PUSH
SW128	1-552-774-00	SWITCH, PUSH

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♠:A-6728-207-A TS-14 BOARD, COMPLETE E-156

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref.No	Part No	Description			Remark
C041	1-123-323-00	ELECT	470MF	20%	16V
C042	1-101-004-00	CERAMIC	0.01MF		50V
C043	1-161-263-00	CERAMIC	22PF	5%	50V
C044	1-102-668-00	CERAMIC	15PF	5%	50V
C045	1-102-116-00	CERAMIC	680PF	10%	50V
C046	1-101-006-00	CERAMIC	0.047MF		50V
C047	1-108-379-00	MYLAR	0.015MF	10%	100V
C048	1-123-318-00	ELECT	33MF	20%	16V
C051	1-102-493-00	CERAMIC	62PF	5%	50V
C052	1-102-519-00	CERAMIC	36PF	5%	50V
C053	1-101-576-00	CERAMIC	1.5PF	0.25PF	50V
C054	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C055	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C056	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C057	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C058	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C059	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C060	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C061	1-102-973-00	CERAMIC	100PF	5%	50V
C062	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C081	1-123-295-00	ELECT	100MF	20%	6.3V
C082	1-102-945-00	CERAMIC	8PF	0.5PF	50V
C084	1-123-320-00	ELECT	100MF	20%	16V
C085	1-123-319-00	ELECT	47MF	20%	16V

FILTER

CF001	1-527-260-00	CERAMIC FILTER

CONNECTOR

CN001	●:1-508-744-00	PIN, CONNECTOR 10P
CN002	●:1-508-846-00	PIN, CONNECTOR 8P
CN003	●:1-508-846-00	PIN, CONNECTOR 8P
CN004	●:1-508-845-00	PIN, CONNECTOR 6P

TRIMMER

CT001	1-409-332-00	CERAMIC TRAP
CT002	1-409-332-00	CERAMIC TRAP

DIODE

D001	8-759-157-40	IC UPC574J
D002	8-719-901-83	DIODE 1SS83
D003	8-719-815-55	DIODE 1S1555

IC

IC001	8-751-771-10	IC CX-177B
IC002	8-759-601-95	IC CX-095D
IC003	=>8-759-651-35	M5135P

COIL

L001	1-425-613-00	COIL, AIR-CORE, QF TYPE
L002	1-407-189-XX	MICRO INDUCTOR 8.2UH

Ref.No	Part No	Description			Remark
L003	1-407-159-XX	MICRO INDUCTOR 15UH			
L004	1-407-178-XX	MICRO INDUCTOR 1UH			
L006	1-407-172-XX	MICRO INDUCTOR 180UH			
L007	1-407-169-XX	MICRO INDUCTOR 100UH			
L008	1-407-184-XX	MICRO INDUCTOR 3.3UH			
L009	1-407-180-XX	MICRO INDUCTOR 1.5UH			
L015	1-407-158-XX	MICRO INDUCTOR 12UH			

CONNECTOR

P001	●:1-526-575-00	SOCKET, PLUG

TRANSISTOR

Q002	8-723-302-00	TRANSISTOR 2SK43-2
Q003	=>8-769-200-00	TRANSISTOR 2SK107-2
Q004	8-729-663-47	TRANSISTOR 2SC1363-6
Q005	8-729-177-43	TRANSISTOR 2SD774-K
Q006	8-729-663-47	TRANSISTOR 2SC1363-6

RESISTOR

R001	1-246-431-00	CARBON	18	5%	1/4W	
R002	1-246-457-00	CARBON	220	5%	1/4W	
R003	1-246-423-00	CARBON	8.2	5%	1/4W	
R004	1-246-449-00	CARBON	100	5%	1/4W	
R005	1-246-457-00	CARBON	220	5%	1/4W	
R006	1-246-505-00	CARBON	22K	5%	1/4W	
R007	1-246-525-00	CARBON	150K	5%	1/4W	
R008	1-246-475-00	CARBON	1.2K	5%	1/4W	
R009	1-246-461-00	CARBON	330	5%	1/4W	
R010	1-246-481-00	CARBON	2.2K	5%	1/4W	
R011	1-246-533-00	CARBON	330K	5%	1/4W	
R012	1-246-535-00	CARBON	390K	5%	1/4W	
R013	1-246-477-00	CARBON	1.5K	5%	1/4W	
R014	1-246-486-00	CARBON	3.6K	5%	1/4W	
R020	1-246-513-00	CARBON	47K	5%	1/4W	
R021	1-246-545-00	CARBON	1M	5%	1/4W	
R022	1-246-529-00	CARBON	220K	5%	1/4W	
R023	1-246-543-00	CARBON	820K	5%	1/4W	
R024	1-246-537-00	CARBON	470K	5%	1/4W	
R028	1-246-505-00	CARBON	22K	5%	1/4W	
R029	⚠●1-246-979-00	CARBON	1.2	5%	1/8W	F
R030	1-246-473-00	CARBON	1K	5%	1/4W	
R031	1-246-481-00	CARBON	2.2K	5%	1/4W	
R032	1-246-437-00	CARBON	33	5%	1/4W	
R033	1-246-493-00	CARBON	6.8K	5%	1/4W	
R034	1-246-509-00	CARBON	33K	5%	1/4W	
R035	⚠●1-206-686-00	METAL	8.2K	5%	2W	F
R041	⚠●1-211-930-00	CARBON	33	5%	1/8W	F
R042	1-246-473-00	CARBON	1K	5%	1/4W	
R043	1-246-473-00	CARBON	1K	5%	1/4W	
R044	1-246-497-00	CARBON	10K	5%	1/4W	
R051	1-246-473-00	CARBON	1K	5%	1/4W	
R052	1-246-473-00	CARBON	1K	5%	1/4W	
R053	⚠●1-247-032-00	CARBON	68	5%	1/8W	F

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

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Ref.No	Part No	Description				Remark

CAPACITOR

Ref.No	Part No	Description				Remark
C001	1-123-316-00	ELECT	10MF	20%	16V	
C002	1-107-235-00	MICA	510PF	5%	50V	
C003	1-123-328-00	ELECT	4.7MF	20%	25V	
C004	1-123-353-00	ELECT	2.2MF	20%	50V	
C005	1-123-353-00	ELECT	2.2MF	20%	50V	

CONNECTOR

Ref.No	Part No	Description	Remark
CN001	♠:1-508-736-00	PIN, CONNECTOR 10P	

DIODE

Ref.No	Part No	Description	Remark
D001	8-719-815-55	DIODE 1S1555	
D002	8-719-815-55	DIODE 1S1555	
D003	8-719-815-55	DIODE 1S1555	
D004	8-719-815-55	DIODE 1S1555	
D005	8-719-815-55	DIODE 1S1555	
D006	8-719-815-55	DIODE 1S1555	
D007	8-719-815-55	DIODE 1S1555	
D008	8-719-815-55	DIODE 1S1555	
D009	8-719-815-55	DIODE 1S1555	
D010	8-719-815-55	DIODE 1S1555	
D011	8-719-815-55	DIODE 1S1555	

IC

Ref.No	Part No	Description	Remark
IC001	=>8-759-245-20	IC TC4520BP	
IC002	8-759-240-11	IC TC4011BP	
IC003	8-758-040-00	IC CX-804	

TRANSISTOR

Ref.No	Part No	Description	Remark
Q001	8-729-902-11	TRANSISTOR 2SC2021	
Q002	8-729-902-11	TRANSISTOR 2SC2021	
Q003	8-729-902-11	TRANSISTOR 2SC2021	
Q004	8-729-902-11	TRANSISTOR 2SC2021	

RESISTOR

Ref.No	Part No	Description				Remark
R001	1-246-493-00	CARBON	6.8K	5%	1/4W	
R002	1-246-511-00	CARBON	39K	5%	1/4W	
R003	1-246-511-00	CARBON	39K	5%	1/4W	
R004	1-246-521-00	CARBON	100K	5%	1/4W	
R005	1-246-473-00	CARBON	1K	5%	1/4W	
R006	1-246-538-00	CARBON	510K	5%	1/4W	
R007	1-246-497-00	CARBON	10K	5%	1/4W	
R008	1-246-497-00	CARBON	10K	5%	1/4W	
R009	1-246-524-00	CARBON	130K	5%	1/4W	
R010	1-246-473-00	CARBON	1K	5%	1/4W	
R011	1-246-509-00	CARBON	33K	5%	1/4W	
R012	1-246-497-00	CARBON	10K	5%	1/4W	
R013	1-246-532-00	CARBON	300K	5%	1/4W	
R014	1-246-497-00	CARBON	10K	5%	1/4W	
R015	1-246-513-00	CARBON	47K	5%	1/4W	
R016	1-246-504-00	CARBON	20K	5%	1/4W	
R017	1-246-521-00	CARBON	100K	5%	1/4W	
R018	1-246-521-00	CARBON	100K	5%	1/4W	
R019	1-246-521-00	CARBON	100K	5%	1/4W	
R020	1-246-508-00	CARBON	30K	5%	1/4W	
R021	1-246-508-00	CARBON	30K	5%	1/4W	
R022	1-246-508-00	CARBON	30K	5%	1/4W	
R023	1-246-508-00	CARBON	30K	5%	1/4W	
R024	1-246-529-00	CARBON	220K	5%	1/4W	
R025	1-246-529-00	CARBON	220K	5%	1/4W	
R026	1-246-529-00	CARBON	220K	5%	1/4W	
R027	1-246-529-00	CARBON	220K	5%	1/4W	
R028	1-246-509-00	CARBON	33K	5%	1/4W	
R029	1-246-521-00	CARBON	100K	5%	1/4W	
R030	1-246-512-00	CARBON	43K	5%	1/4W	
R031	1-246-529-00	CARBON	220K	5%	1/4W	
R032	1-246-485-00	CARBON	3.3K	5%	1/4W	

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Ref.No	Part No	Description	Remark
	♠:A-6721-066-A	**IF-11 BOARD, COMPLETE**	E-152
	♠:4-303-805-00	CASE, SHIELD	
	♠:4-329-114-00	LID, REAR, SHIELD CASE, AFT	
	♠:4-329-115-00	CASE, SHIELD, MAIN	
	♠:4-329-116-00	LID, UPPER, SHIELD CASE, VIF	
	♠:4-329-118-00	LID, UPPER, SHIELD CASE, AFT	
	♠:4-329-119-00	CASE, SHIELD, MAIN	
	♠:4-329-120-00	LID, REAR, SHIELD CASE, VIF	

CAPACITOR

Ref.No	Part No	Description				Remark
C001	1-102-528-00	CERAMIC	91PF	5%	50V	
C002	1-161-269-00	CERAMIC	68PF	5%	50V	
C003	1-101-880-00	CERAMIC	47PF	5%	50V	
C004	1-102-525-00	CERAMIC	68PF	5%	50V	
C005	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C006	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C007	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C008	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C009	1-123-319-00	ELECT	47MF	20%	16V	
C010	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C011	1-123-351-00	ELECT	0.47MF	20%	50V	
C012	1-161-051-00	CERAMIC	0.01MF	10%	50V	
C013	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C014	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C015	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C016	1-123-352-00	ELECT	1MF	20%	50V	
C022	1-108-377-00	MYLAR	0.01MF	10%	100V	
C023	1-123-320-00	ELECT	100MF	20%	16V	
C024	1-123-351-00	ELECT	0.47MF	20%	50V	
C025	1-123-351-00	ELECT	0.47MF	20%	50V	
C026	1-123-351-00	ELECT	0.47MF	20%	50V	
C027	1-101-804-00	CERAMIC	10PF	5%	500V	
C028	1-123-267-00	ELECT	2.2MF	20%	160V	
C029	1-108-377-00	MYLAR	0.01MF	10%	100V	
C030	1-102-973-00	CERAMIC	100PF	5%	50V	

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Ref.No	Part No	Description				Remark
R081	1-246-487-00	CARBON	3.9K	5%	1/4W	
R082	1-246-459-00	CARBON	270	5%	1/4W	
R083	1-246-483-00	CARBON	2.7K	5%	1/4W	
R084	1-246-481-00	CARBON	2.2K	5%	1/4W	
R085	1-246-521-00	CARBON	100K	5%	1/4W	
		VARIABLE RESISTOR				
RV001	1-224-646-XX	RES, ADJ, CARBON 22K				
		TRANSFORMER				
T001	1-409-213-00	COIL, SOUND TRAP VIFT-T2				
T002	1-409-318-00	COIL, TRAP				
T003	1-409-319-00	COIL, TRAP				
T004	1-404-117-00	FILTER, HELICAL				
T005	1-404-046-00	COIL, I.F.T				
T006	1-403-731-00	COIL, DISCRI PRIMARY AF				
T031	1-446-295-00	TRANSFORMER, CONVERTOR				
T041	1-403-367-00	COIL, SIF				
T042	1-403-871-00	SIFT-2 COIL				
T051	1-403-904-00	COIL, DISCRI PRIMARY				
T052	1-403-905-00	COIL, DISCRI SECONDARY				

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Ref.No	Part No	Description				Remark
	♠:1-600-015-00	LF-9 BOARD, COMPLETE				E-201
	1-533-127-00	FUSE CLIP				
		CAPACITOR				
C101	⚠.1-130-060-00	FILM	0.1MF	20%	125V	
C102	⚠.1-161-747-00	CERAMIC	0.0022MF	20%	125V	
C103	⚠.1-161-747-00	CERAMIC	0.0022MF	20%	125V	
		CONNECTOR				
CN101	♠:1-560-033-00	PLUG, CONNECTOR (3P)				
CN102	♠:1-508-786-00	2P PLUG (M)				
		FUSE				
F101	⚠.1-532-403-XX	FUSE				
		COIL				
L101	⚠.1-421-225-00	COIL, LINE FILTER				
		RESISTOR				
R101	⚠.1-202-723-00	COMPOSITION	2.2M	10%	1/2W	

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Ref.No	Part No	Description				Remark
	♠:A-6723-156-A	PS-12 BOARD, COMPLETE				E-202
	1-533-127-00	FUSE CLIP				
	♠:3-665-806-00	PLATE, SHIELD, HEAT				

Ref.No	Part No	Description			Remark
		CAPACITOR			
C001	1-102-050-00	CERAMIC	0.01MF		500V
C002	1-123-403-00	ELECT	4700MF		25V
C003	1-123-332-00	ELECT	47MF	20%	25V
C004	1-108-365-00	MYLAR	0.001MF	10%	100V
C005	1-123-351-00	ELECT	0.47MF	20%	50V
C006	1-123-319-00	ELECT	47MF	20%	16V
C007	1-102-050-00	CERAMIC	0.01MF		500V
C008	1-102-050-00	CERAMIC	0.01MF		500V
C009	1-123-650-00	ELECT	10000MF		35V
C010	1-123-319-00	ELECT	47MF	20%	16V
C011	1-102-050-00	CERAMIC	0.01MF		500V
C012	1-123-348-00	ELECT	470MF	20%	35V
C013	1-123-350-00	ELECT	2200MF	20%	35V
C014	1-123-316-00	ELECT	10MF	20%	16V
C015	1-123-320-00	ELECT	100MF	20%	16V
C016	1-123-353-00	ELECT	2.2MF	20%	50V
		CONNECTOR			
CN001	♠:1-508-742-00	PIN, CONNECTOR 3P			
CN002	♠:1-508-910-00	PIN, CONNECTOR 12P			
CN003	♠:1-508-797-00	PIN, CONNECTOR 4P			
CN004	♠:1-508-742-00	PIN, CONNECTOR 3P			
CN005	♠:1-508-766-00	4P PLUG (M)			
		DIODE			
D001	⚠.8-719-941-13	DIODE M4B41-13			
D002	⚠.8-719-941-13	DIODE M4B41-13			
D003	8-719-200-02	DIODE 10E-2			
D004	8-719-200-02	DIODE 10E-2			
D005	8-719-113-21	DIODE RD13E-B1Z8			
D006	8-719-162-07	DIODE RD6.2E-B			
		FUSE			
F001	⚠.1-532-348-00	FUSE			
F002	⚠.1-532-349-XX	FUSE			
		TRANSISTOR			
Q001	=>8-729-245-83	TRANSISTOR 2SC2458			
Q002	=>8-729-245-83	TRANSISTOR 2SC2458			
Q003	8-729-245-83	TRANSISTOR 2SC2458			
Q004	8-729-245-83	TRANSISTOR 2SC2458			
		RESISTOR			
R001	1-246-497-00	CARBON	10K	5%	1/4W
R002	1-246-505-00	CARBON	22K	5%	1/4W
R003	1-246-497-00	CARBON	10K	5%	1/4W
R004	1-246-497-00	CARBON	10K	5%	1/4W
R005	1-246-505-00	CARBON	22K	5%	1/4W
R006	1-246-441-00	CARBON	47	5%	1/4W
R007	1-246-477-00	CARBON	1.5K	5%	1/4W
R008	1-246-466-00	CARBON	510	5%	1/4W

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No	Part No	Description				Remark
R009	1-246-473-00	CARBON	1K	5%	1/4W	
R010	1-246-483-00	CARBON	2.7K	5%	1/4W	
R011	1-246-481-00	CARBON	2.2K	5%	1/4W	
R012	⚠.1-211-506-00	CARBON	22	5%	1/4W	F
R013	⚠.1-212-367-00	METAL	3.9	5%	1W	F
R014	1-246-480-00	CARBON	2K	5%	1/4W	
R015	1-246-497-00	CARBON	10K	5%	1/4W	

VARIABLE RESISTOR

RV001	1-224-642-XX	RES, ADJ, CARBON 1K

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♠:A-6728-192-A DT-46 BOARD, COMPLETE E-207

♠:3-661-677-00 HOLDER (W), INDICATION TUBE

SPARK GAP

FL001	1-519-198-00	FLUORESCENT INDICATOR TUBE	E-212

RESISTOR

R001	1-246-807-00	CARBON	100K	5%	1/8W
R002	1-246-807-00	CARBON	100K	5%	1/8W
R003	1-246-807-00	CARBON	100K	5%	1/8W
R004	1-246-807-00	CARBON	100K	5%	1/8W
R005	1-246-807-00	CARBON	100K	5%	1/8W
R006	1-246-807-00	CARBON	100K	5%	1/8W

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♠:A-6728-193-A DT-47 BOARD, COMPLETE E-208

CAPACITOR

C101	1-123-351-00	ELECT	0.47MF	20%	50V
C102	1-123-306-00	ELECT	47MF	20%	10V
C103	1-161-032-00	CERAMIC	0.01MF	20%	25V

COMPOSITION

CP101	1-231-659-00	COMPOSITION CIRCUIT BLOCK
CP102	1-231-659-00	COMPOSITION CIRCUIT BLOCK

DIODE

D101	8-719-139-07	DIODE RD3.9E-B
D102	8-719-815-55	DIODE 1S1555

TRANSISTOR

Q101	8-729-902-11	TRANSISTOR 2SC2021
Q102	8-729-902-11	TRANSISTOR 2SC2021
Q103	8-729-902-11	TRANSISTOR 2SC2021
Q104	8-729-902-11	TRANSISTOR 2SC2021
Q105	8-729-902-11	TRANSISTOR 2SC2021
Q106	8-729-902-11	TRANSISTOR 2SC2021
Q107	8-729-902-11	TRANSISTOR 2SC2021

Ref.No	Part No	Description				Remark
Q108	8-729-902-11	TRANSISTOR 2SC2021				
Q109	8-729-902-11	TRANSISTOR 2SC2021				
Q110	8-729-902-11	TRANSISTOR 2SC2021				
Q111	8-729-902-11	TRANSISTOR 2SC2021				
Q112	8-729-902-11	TRANSISTOR 2SC2021				
Q113	8-729-902-11	TRANSISTOR 2SC2021				
Q114	8-729-902-11	TRANSISTOR 2SC2021				
Q115	=>8-729-117-54	TRANSISTOR 2SA1175				
Q116	8-729-902-11	TRANSISTOR 2SC2021-R				

RESISTOR

R101	1-246-795-00	CARBON	10K	5%	1/8W
R102	1-246-468-00	CARBON	620	5%	1/4W
R103	1-246-449-00	CARBON	100	5%	1/4W
R104	1-246-795-00	CARBON	10K	5%	1/8W
R105	1-246-807-00	CARBON	100K	5%	1/8W
R106	1-246-795-00	CARBON	10K	5%	1/8W

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♠:A-6728-194-A DT-48 BOARD, COMPLETE E-209

CAPACITOR

C301	1-123-352-00	ELECT	1MF	20%	50V
C302	1-107-075-00	MICA	39PF	5%	50V
C303	1-108-595-00	MYLAR	0.047MF	5%	50V

DIODE

D301	8-719-815-55	DIODE 1S1555

IC

IC301	8-759-982-83	IC MB8841-283

COIL

L301	1-407-178-XX	MICRO INDUCTOR 1UH

RESISTOR

R301	1-246-489-00	CARBON	4.7K	5%	1/4W
R302	1-214-143-00	METAL	3K	1%	1/4W

VARIABLE RESISTOR

RV301	1-226-702-00	RES, ADJ, METAL GRAZE 2.2K

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♠:A-6728-195-A DT-49 BOARD, COMPLETE E-210

SWITCH E-213

S401	1-552-267-00	SWITCH, LEVER SLIDE

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Ref.No	Part No	Description			Remark
	♠:A-6728-196-A	DT-50 BOARD, COMPLETE			E-211
	♠:3-661-576-00	HOLDER, LED			
	♠:3-701-748-00	CLAMP			

CAPACITOR

C202	1-123-316-00	ELECT	10MF	20%	16V
C203	1-161-032-00	CERAMIC	0.01MF	20%	25V
C204	1-123-357-00	ELECT	22MF	20%	50V
C205	1-123-357-00	ELECT	22MF	20%	50V
C206	1-123-359-00	ELECT	47MF	20%	50V
C210	1-161-032-00	CERAMIC	0.01MF	20%	25V
C211	1-161-032-00	CERAMIC	0.01MF	20%	25V
C212	1-161-028-00	CERAMIC	0.0022MF	20%	25V
C213	1-161-032-00	CERAMIC	0.01MF	20%	25V
C214	1-123-328-00	ELECT	4.7MF	20%	25V
C215	1-161-032-00	CERAMIC	0.01MF	20%	25V

CONNECTOR

CN001	♠:1-508-850-00	PIN, CONNECTOR 12P
CN002	♠:1-508-736-00	PIN, CONNECTOR 10P
CN003	♠:1-508-847-00	PIN, CONNECTOR 4P
CN201	♠:1-561-340-00	SOCKET, CONNECTOR 15P

COMPOSITION

CP201	1-231-569-00	COMPOSITION CIRCUIT BLOCK
CP202	1-231-599-00	COMPOSITION CIRCUIT BLOCK

DIODE

D203	8-719-815-55	DIODE 1S1555
D204	8-719-815-55	DIODE 1S1555
D205	8-719-815-55	DIODE 1S1555
D206	8-719-815-55	DIODE 1S1555
D207	8-719-200-02	DIODE 10E-2
D208	8-719-815-55	DIODE 1S1555
D209	8-719-815-55	DIODE 1S1555
D210	8-719-815-55	DIODE 1S1555
D211	8-719-815-55	DIODE 1S1555
D212	8-719-815-55	DIODE 1S1555
D213	8-719-815-55	DIODE 1S1555
D214	8-719-815-55	DIODE 1S1555
D215	8-719-815-55	DIODE 1S1555
D218	8-719-815-55	DIODE 1S1555
D219	8-719-815-55	DIODE 1S1555
D220	8-719-815-55	DIODE 1S1555
D221	8-719-815-55	DIODE 1S1555
D222	8-719-815-55	DIODE 1S1555
D223	8-719-815-55	DIODE 1S1555
D224	8-719-812-41	DIODE TLR124
D225	8-719-812-41	DIODE TLR124
D226	8-719-815-55	DIODE 1S1555
D227	8-719-815-55	DIODE 1S1555
D228	8-719-815-55	DIODE 1S1555

Ref.No	Part No	Description			Remark

IC

IC201	8-759-108-05	IC UPC78L05A
IC202	8-759-240-81	IC TC4081BP
IC301	8-759-981-80	IC MB8841-180

COIL

L201	1-407-191-XX	MICRO INDUCTOR 470UH

PILOT LAMP

PL201	1-518-391-00	LAMP, PILOT
PL202	1-518-392-00	LAMP, PILOT
PL203	1-518-393-00	LAMP, PILOT

TRANSISTOR

Q201	8-729-902-11	TRANSISTOR 2SC2021
Q202	=>8-729-117-54	TRANSISTOR 2SA1175
Q203	8-729-902-11	TRANSISTOR 2SC2021
Q204	8-729-902-11	TRANSISTOR 2SC2021
Q205	=>8-729-117-54	TRANSISTOR 2SA1175
Q206	8-729-902-11	TRANSISTOR 2SC2021
Q207	8-729-902-11	TRANSISTOR 2SC2021
Q208	8-729-902-11	TRANSISTOR 2SC2021
Q209	8-729-902-11	TRANSISTOR 2SC2021
Q210	8-729-902-11	TRANSISTOR 2SC2021

RESISTOR

R202	1-246-795-00	CARBON	10K	5%	1/8W
R203	1-246-803-00	CARBON	47K	5%	1/8W
R204	1-246-803-00	CARBON	47K	5%	1/8W
R205	1-246-473-00	CARBON	1K	5%	1/4W
R206	1-246-803-00	CARBON	47K	5%	1/8W
R207	1-246-804-00	CARBON	56K	5%	1/8W
R208	1-246-433-00	CARBON	22	5%	1/4W
R209	1-246-803-00	CARBON	47K	5%	1/8W
R210	1-246-433-00	CARBON	22	5%	1/4W
R211	1-246-803-00	CARBON	47K	5%	1/8W
R212	1-246-433-00	CARBON	22	5%	1/4W
R215	1-246-471-00	CARBON	820	5%	1/4W
R216	1-246-473-00	CARBON	1K	5%	1/4W
R217	1-246-456-00	CARBON	200	5%	1/4W
R220	1-246-795-00	CARBON	10K	5%	1/8W
R221	1-246-807-00	CARBON	100K	5%	1/8W
R222	1-246-795-00	CARBON	10K	5%	1/8W
R223	1-246-807-00	CARBON	100K	5%	1/8W
R224	1-246-870-00	CARBON	160K	5%	1/8W
R225	1-246-795-00	CARBON	10K	5%	1/8W
R226	1-246-795-00	CARBON	10K	5%	1/8W
R227	1-246-800-00	CARBON	27K	5%	1/8W
R230	1-246-787-00	CARBON	2.2K	5%	1/8W
R231	1-246-795-00	CARBON	10K	5%	1/8W
R232	1-246-807-00	CARBON	100K	5%	1/8W
R233	1-246-795-00	CARBON	10K	5%	1/8W

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Ref.No	Part No	Description				Remark
R234	1-246-807-00	CARBON	100K	5%	1/8W	
R235	1-246-807-00	CARBON	100K	5%	1/8W	
R236	1-246-807-00	CARBON	100K	5%	1/8W	
R237	1-246-807-00	CARBON	100K	5%	1/8W	
R238	1-246-807-00	CARBON	100K	5%	1/8W	
R239	1-246-807-00	CARBON	100K	5%	1/8W	
R240	1-246-807-00	CARBON	100K	5%	1/8W	
R241	1-246-807-00	CARBON	100K	5%	1/8W	
R242	1-246-807-00	CARBON	100K	5%	1/8W	
R243	1-246-803-00	CARBON	47K	5%	1/8W	
R244	1-246-799-00	CARBON	22K	5%	1/8W	
R245	1-246-460-00	CARBON	300	5%	1/4W	
R246	1-246-799-00	CARBON	22K	5%	1/8W	
R247	1-246-795-00	CARBON	10K	5%	1/8W	
R248	1-246-803-00	CARBON	47K	5%	1/8W	
R249	1-246-803-00	CARBON	47K	5%	1/8W	
R250	1-246-795-00	CARBON	10K	5%	1/8W	
R251	1-246-803-00	CARBON	47K	5%	1/8W	
R252	1-246-803-00	CARBON	47K	5%	1/8W	
R253	1-246-803-00	CARBON	47K	5%	1/8W	
R254	1-246-807-00	CARBON	100K	5%	1/8W	
R255	1-246-497-00	CARBON	10K	5%	1/4W	
R256	1-246-805-00	CARBON	68K	5%	1/8W	

SWITCH

SW201	1-516-977-00	SWITCH, LEVER SLIDE

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♠:1-601-973-00 DT-18 BOARD E-206

CONNECTOR

CN301	♠:1-560-211-00	PLUG, CONNECTOR 15P

IC

DB301	8-759-100-54	IC UPA54H
DB302	8-759-100-54	IC UPA54H
DB303	8-759-100-54	IC UPA54H
DB304	8-759-100-54	IC UPA54H

COMPOSITION

RB301	1-231-569-00	COMPOSITION CIRCUIT BLOCK

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♠:1-603-567-00 RC-11 BOARD

	1-226-973-00	RES, VAR, SLIDE (WITH SW) 50K

DIODE

D001	8-719-812-41	DIODE TLR124
D002	8-719-812-42	DIODE TLY124

Ref.No	Part No	Description				Remark

RESISTOR

R001	1-246-473-00	CARBON	1K	5%	1/4W
R002	1-246-483-00	CARBON	2.7K	5%	1/4W
R003	1-246-509-00	CARBON	33K	5%	1/4W

VARIABLE RESISTOR

RV001	1-226-955-00	RES, VAR, CARBON (WITH SW) 10KX2

SWITCH

SW001	1-552-412-00	SWITCH, KEY BOARD
SW002	1-552-412-00	SWITCH, KEY BOARD
SW003	1-552-412-00	SWITCH, KEY BOARD
SW004	1-552-412-00	SWITCH, KEY BOARD
SW006	1-552-412-00	SWITCH, KEY BOARD

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♠:1-600-038-00 TR-1 BOARD E-203

TRANSISTOR

Q6301⚠	8-729-331-53	TRANSISTOR 2SC2315

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♠:1-600-101-00 FG-1 BOARD E-504

	3-658-161-00	HOLDER, DME
	♠:3-659-313-00	PLATE, ADJUSTMENT, DME

IC

DM701	8-745-101-01	DM-101	E-506

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♠:1-601-148-00 LA-3 BOARD E-157

	3-659-792-00	HOLDER (D), LED

CONNECTOR

CN501	♠:1-508-734-00	PIN, CONNECTOR 3P

DIODE

D501	8-719-812-41	DIODE TLR124

SWITCH

S501	1-552-412-00	SWITCH, KEY BOARD
S502	1-516-778-XX	SWITCH, SLIDE

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♠:1-601-960-00 TB-1 BOARD E-158

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Ref.No	Part No	Description				Remark
		BATTERY				
B001	1-528-074-00	BATTERY, NICKEL CADMIUM				
		CAPACITOR				
C001	1-108-365-00	MYLAR	0.001MF	10%	100V	
C002	1-123-320-00	ELECT	100MF	20%	16V	
C003	1-108-244-00	MYLAR	0.033MF	10%	50V	
		CONNECTOR				
CN001	♠:1-508-742-00	PIN, CONNECTOR 3P				
CN002	♠:1-508-916-00	CONNECTOR PIN 2P				
		DIODE				
D001	8-719-175-07	DIODE RD7.5E-B				
D002	8-719-901-83	DIODE 1SS83				
D003	8-719-151-07	DIODE RD5.1E-B				
		COIL				
L001	1-407-716-00	MICRO INDUCTOR 820UH				
		TRANSISTOR				
Q001	=>8-729-663-47	TRANSISTOR 2SC1364				
Q002	=>8-729-177-43	TRANSISTOR 2SD774				
		RESISTOR				
R001	1-246-449-00	CARBON	100	5%	1/4W	
R002	1-246-456-00	CARBON	200	5%	1/4W	
R003	1-246-470-00	CARBON	750	5%	1/4W	
R004	1-246-480-00	CARBON	2K	5%	1/4W	
R005	1-246-473-00	CARBON	1K	5%	1/4W	
		TRANSFORMER				
T001	1-446-571-00	TRANSFORMER, CONVERTOR				

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	♠:1-603-164-00	TR-5 BOARD				E-458
		TRANSISTOR				
Q001	⚠.8-729-331-53	TRANSISTOR 2SC2315				

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	♠:1-603-172-00	NF-3 BOARD				E-555
		CAPACITOR				
C201	1-161-076-00	CERAMIC	0.1MF	20%	50V	
C202	1-161-076-00	CERAMIC	0.1MF	20%	50V	
		CONNECTOR				
CN201	♠:1-508-742-00	PIN, CONNECTOR 3P				

Ref.No	Part No	Description				Remark
		COIL				
L201	1-421-225-00	COIL, LINE FILTER				

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	♠:1-603-173-00	TR-7 BOARD				E-204
		TRANSISTOR				
Q001	⚠.8-729-316-16	TRANSISTOR 2SC1061				

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	♠:1-603-170-00	NF-1 BOARD				E-457
		CAPACITOR				
C401	1-101-006-00	CERAMIC	0.047MF		50V	
		CONNECTOR				
CN9401	♠:1-508-849-00	PIN, CONNECTOR 8P				
		THERMISTOR				
TH9401	1-800-198-XX	THERMISTOR				
TH9402	1-800-202-XX	THERMISTOR S-10K				

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	♠:1-603-566-00	RL-2 BOARD				E-401
		TRANSISTOR				
Q6801	8-719-751-42	DIODE NJL5141E				

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	♠:1-603-551-00	CN-10 BOARD				E-451
	♠:3-659-359-00	PLATE, BOOST, REED SWITCH				
		SWITCH				
SW251	1-552-180-00	SWITCH, REED				

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	♠:1-603-552-00	CN-11 BOARD				E-452
		CAPACITOR				
C201	1-123-318-00	ELECT	33MF	20%	16V	
		CONNECTOR				
CN201	♠:1-508-847-00	PIN, CONNECTOR 4P				
CN202	♠:1-508-734-21	PIN, CONNECTOR 3P				
CN203	♠:1-508-847-00	PIN, CONNECTOR 4P				

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